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NAVAL POSTGRADUATE SCHOOL

MONTEREY, CALIFORNIA

THESIS

**AN ANALYSIS OF MIGRATION ALTERNATIVES FOR
THE NAVY RESERVE APPLY PROGRAM**

by

Byron D. Moss
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March 2008

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**AN ANALYSIS OF MIGRATION ALTERNATIVES OF THE APPLY PROCESS
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ABSTRACT

As the Navy Reserve Force continues to align with the Active Navy to create a total force, initiatives are in place to migrate existing Navy Manpower, Personnel, and Distribution systems into a single enterprise system. This migration will improve data integrity, and provide the foundation for a position based Navy which is needed to support Sea Warrior. With this focus in mind, this thesis studies the feasibility of combining the current Navy Reserve Officer detailing and placement systems (APPLY/JOAPPLY) with other Navy systems with similar functionalities. The goal is to find a reasonable solution that will ultimately assist the Navy Reserves' transition toward the total force enterprise system.

Currently APPLY/JOAPPLY does not exist within the active Navy; however, both active and reserve Navy use Career Management System-Interactive Detailing (CMS-ID) as a personnel management tool. Not only does CMS-ID manage enlisted records, but it also has access to officer data, though not currently in use. Using a common system for both the Active and Reserve components could provide an economy of scales in systems management and maintenance, thus providing cost savings through the elimination of the management of two different information systems.

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LIST OF ACRONYMS AND ABBREVIATIONS

AC	Active Component
BPR	Business Process Redesign
CAC	Common Access Card
CEC	Civil Engineering Corps
CIO	Chief Information Officer
CCC	Command Career Counselor
COTS	Commercial-off-the-Shelf
CNRF	Commander, Navy Reserve Force
CNRFC	Commander, Navy Reserve Force Command
DOB	Date of Birth
DoD	Department of Defense
DoN	Department of Navy
DRILLRES	Drilling Reservist
EAIS	Enlisted Assignment Information System
EMPRS	Electronic Military Personnel Records System
ESC	Executive Steering Committee
FTS	Full Time Support
IAP	In Assignment Processing
INTEL	Intelligence
IRR	Individual Ready Reserve
IT	Information Technology
IRM	Information Resources Management
ISIC	Immediate Supervisor in Command
JCMS	JASS Career Management System
KM	Knowledge Management
KVA	Knowledge Value Added
METOC	Meteorology and Oceanography
NAVAIR	Navy Air System
NEPLO	Navy Emergency Preparedness Liaison Officer
NKO	Navy Knowledge Online
NMCMPS	Navy-Marine Corps Mobilization Processing System
NMCI	Navy Marine Corp Intranet

NOBC	Navy Officer Billet Code
NOSC	Naval Operational Support Center
NPC	Naval Personnel Command
NR	Navy Region
NRA	Naval Reserve Activity
NSIPS	Navy Standard Integrated Personnel System
NSS	National Security Systems
OSO	Operational Support Officers
OSR	Officer Service Record
PRD	Project Rotation Date
PSR	Performance Summary Record
RHS	Reserve Headquarters System
RC	Reserve Component
RCC	Reserve Component Commander
REDCOM	Readiness Command
RESFOR	Reserve Forces
ROI	Return on Investment
ROK	Return on Knowledge
SELRES	Selected Reserve
SSN	Social Security Number
SPAWAR	Space Warfare
SYSCOM	System Command
TIS	Time in Service
USN	United States Navy

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I. INTRODUCTION

A. PURPOSE

This thesis is an analysis of the National Command and Senior Officer Non-Command Billet Screening and Assignment Board (APPLY Board), the JOAPPLY application, and other personnel processes which are used in the assignment of Navy Sailors and Officers into their ultimate jobs. The goal is to find gaps, overlaps, and redundancies among these applications and propose a solution to minimize these redundancies. This research includes the potential migration or integration of the existing applications and/or the collaboration of different technologies. Consideration will also be given to leaving the current processes AS-IS. The applications or processes studied include: APPLY, JOAPPLY, Reserve Career Management System/Interactive Detailing (CMS/ID), and Navy-Marine Corps Mobilization Processing System (NMCMPs). Integration with the active duty Navy's detailing processes will be considered, which supports the Department of the Navy's (DoN) Human Resource Information Technology Strategy.

B. BACKGROUND

The Navy Reserve was established officially in 1915. Before the official establishment of the Navy Reserve, reservists played valuable roles in naval history. Navy Reservists saw battle during numerous wars. Some early missions consisted of working in cockpits and the hunting of U-Boats. In the 1980s, a buildup was headed by then Secretary of Navy, John Lehman, who was a Navy Reservist. Even though the Navy Reserves were performing more missions, there still existed a divide between the active and reserve components. In the 1990s, this barrier began to narrow as 21,000 Navy Reservists provided support to Operations Desert Shield and Desert Storm. Also, throughout the history of the Navy Reserve, five U.S. Presidents have adorned the Navy uniform as Navy Reservists: President John F. Kennedy, President Lyndon B. Johnson, President Richard Nixon, President Gerald Ford, and President George H. W. Bush. As

the Navy Reserve aligns with the Active Navy, it will provide mission-capable units and individuals to the Navy-Marine Corps Team throughout the full range of operations from peace to war.

In today's environment the Navy Reserve Force is called on to play an increasingly active role in the day-to-day planning and operational requirements of the Navy's Active Component. The Navy Reserve represents 20% of the Navy's total assets and is a significant force multiplier to fleet requirements needed to meet growing global commitments.

When discussing the Navy Reserve Force, it is important to distinguish between the categories of "Ready Reserves," "Standby Reserve," and "Retired Reserves." The "Ready Reserve" is comprised of "Selected Reserve" (SELRES) and "Individual Ready Reserve" (IRR) personnel. The SELRES is the Navy's primary source of immediate mobilization manpower and is the focus of the discussion throughout this thesis. It is worth noting that these Reservists are paid. They act as either weekend drillers or serve as Full-Time Support (FTS) on active duty. FTS provides support through the training and administration of the Navy Reserve Force. The other reserve categories, "Standby Reserve" (reservist who maintain military affiliation, but are not members of the Ready Reserve [1]) and "Retired Reserve" (reservists who have met retirement criteria and are receiving or will receive retirement pay at age 60), account for approximately 690,000 sailors.

There are several layers in the organizational structure of the Reserve Force (RESFOR). At the top, the Chief of Navy Reserves/ Commander Navy Reserve Force is responsible for the strategy of the Reserve Force. Next, the Reserve Forces Command (RESFORCOM) is responsible for RESFOR operations. Supporting RESFORCOM are five Reserve Component Commands (RCC(s)). These RCC(s) are located at various sites throughout the United States. The RCC(s) act as intermediaries between RESFORCOM and the Navy Operational Support Center (NOSC), formerly named Reserve Centers (RESCEN). At the NOSC level, a direct interface occurs with the Reserve Units and/or reservists.

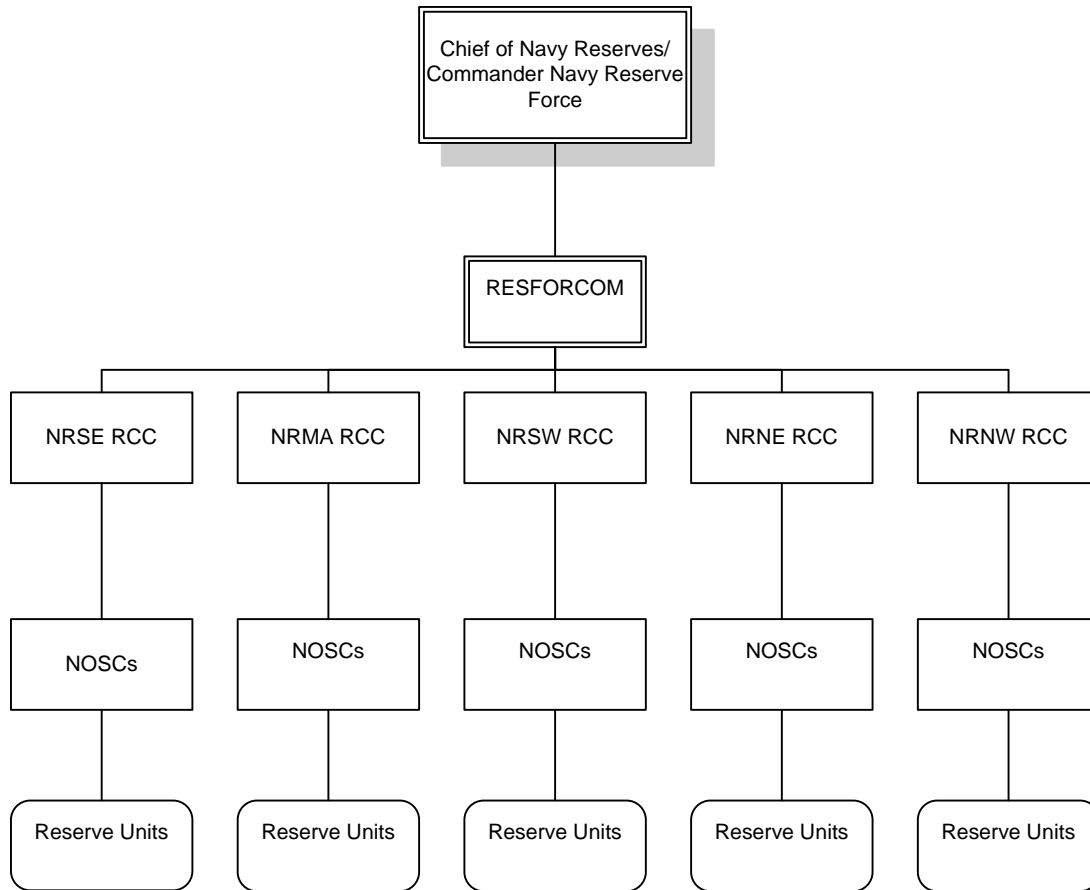


Figure 1. Notional Reserve Force Organizational Chart

There are many activities and requirements performed when a reservist drills at a reserve site. Flexibility provided by recent advances in web technology, allows the reservist the ability to complete some requirements away from the reserve site. One such requirement is the assignment of officers into billets.

Within the Navy Reserve Force, reserve units are assigned to active commands to augment active duty manning as needed. The rank and unit billet structures are similar to the structure of the active duty navy organization. But the selection and assignment of the navy reserve officers is different from the process of assignment by the active duty navy. Until recently, only senior reserve officers (O-5/O-6) and those few reserve junior officers (O-4 and below) vying for command positions were slated to billets at the national level. Slating is the process of placing an individual into a proposed assignment. For these assignments an APPLY selection board is convened during the summer. This

process was necessary for several reasons: a) to screen and assign the most qualified officers to senior leadership and management positions, and b) to determine a hierarchical list of reserve officers to determine who receives a paid billet. A billet is a specific manpower space, which is assigned qualifiers that define the duties, tasks and functions to be performed and the specific skills and skill level required to perform the delineated functions [2]. The second reason listed above is important because at the senior officer ranks, there are more senior reserve officers than available billets. Historically, junior reserve officers had not experienced similar problems. The junior reserve officers were basically assigned by the local recruiters and/or the local NOSC commanders. For fiscal year 2008, junior reserve officers will be slated to billets similar to the APPLY. JOAPPLY is the term that will describe this process. JO-APPLY will follow the framework set by regular APPLY, which will be discussed in Chapter II.

The APPLY process is not used for the reserve enlisted or the active duty navy. The reserve enlisted uses a system called Career Management System/Interactive Detailing (CMS/ID). CMS/ID is a web based tool that allows enlisted sailors to view and select from available navy jobs via a web interface. Active duty officers use a manual process of career management by engaging in a dialog with his/her detailer. Each process has its own unique business rules and processes which will be explained later.

Another process studied is the Navy-Marine Corps Mobilization Processing System (NMCMPs). NMCMPs is a web-based application, used to streamline the mobilization of reserve forces. Its potential tie in with officer assignments is the ability of NMCMPs to capture and manage personal data into a single system and automate the generation of written mobilization orders. NMCMPs consists of five modules, to be discussed later.

C. SCOPE

The scope of this thesis will include in-depth analyses of the current detailing/slating systems used by the Navy reserves, seeking the solution that best fits the assignment of reserve officers. The analysis will define the AS-IS states of APPLY and JOAPPLY and compare it to CMS/ID and NMCMPs, with the identification of gaps,

overlaps, and redundancies as the ultimate goal. The recommendations will include a potential solution for streamlining the detailing of reserve officers, to include the options of leaving the existing process intact, the migration of APPLY, CMS/ID, and/or NCMCMPS slating processes in a form of middleware layer, or the integration of APPLY and CMS/ID functionality thus creating a new process.

D. METHODOLOGY

The methodologies used to fulfill the requirements of this thesis were:

- 1. AS-IS Model**
- 2. TO-BE Model**
- 3. Interviews with Detailers (Reserve and Active), Process Program Managers and Technical Representatives**
- 4. Personal Observations from Visits to Reserve Forces Command and Naval Personnel Command**

E. ORGANIZATION OF STUDY

Chapter II describes the AS-IS state of reserve officer detailing and a description of CMS/ID and NCMCMPS. It also provides a discussion of how the selections board/APPLY slating process works. Chapter III is a comparison of the APPLY/JOAPPLY functional requirements and a comparison of CMS-ID and NCMCMPS capabilities. Chapter IV analyzes the functional requirements, as well as discusses several financial and website usage metrics. It also includes a discussion of the results of data capture. Chapter V presents the results, conclusions, and recommends the best solution for the slating of navy reserve officers.

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II. CURRENT SYSTEMS

A. INTRODUCTION

This chapter gives a high level discussion of how the APPLY, Career Management System – Interactive Detailing (CMS-ID), and Navy Marine Corps Mobilization Processing System (NMCMPs) processes work. Each subsection describes the “AS-IS” state of the system, which is how each system currently operates, and describes how it interacts with officer and/or enlisted assignments. The intent is to give a historical and operational discussion of how each process works and what it does for all users of the systems.

B. DETAILING AND SLATING

1. Detailing and Slating

Detailing is the label given to the management of a Sailor or Officer’s career. This is facilitated by a Detailer, a personnel officer working in the career management capacity. The detailer assists the service member in selecting the job that best fits his/her needs and/or the needs of the Navy. Slating is the assignment of an officer to a billet. Detailing and Slating sound similar, but there are differences. In detailing, when a member is assigned to a billet, resources are allocated to pay for transferring to the location of this new billet. For Slating, no resources are allocated for the billet. A phrase used to refer to slating is to “pencil in the billet,” which means the Sailor/Officer’s name is used as a place holder for the billet, but no orders are generated at that time.

Another use for the term slate is the Surface Warfare Officer Department Head Slate. Here, a list of available billets is published, the slate, and the Officer works with his detailer to choose the best billet available, slating, that meets the needs of the Officer and the needs of the Navy. Once in agreement, resources are allocated, and the Officer is detailed to the billet.

Other terms used when discussing detailing and slating are placement and assignment. To be placed in or to be assigned to a billet has equivalent meanings. They are used synonymously with slate.

C. APPLY: CURRENT NAVY RESERVE OFFICER SLATING PROCESS

The National Command and Senior Officer Non-Command Billet Screening and Assignment Board (APPLY Board) and the JOAPPLY application are the current processes used in the detailing of navy reserve officers to billets. Assignments are typically two to three years tenures. The length of the assignment varies as delineated by Navy Reserve policy. The type of billet and the program (designator) to which the Officer belongs are two major factors that delineate an Officer's tenure to a billet. Until recently, APPLY was only used for the placement of senior reserve officers and those junior officers vying for commanding officer positions. As of FY 08, APPLY's scope expanded to include the placement of all reserve officers. Even though the APPLY process has increased in scope, there is no increase in workload on the supporting database system (M. Whitfield, personal communication, January 9, 2008). Also, there are subtle differences in policy and business rules pertaining to the governance of senior and junior officer detailing. One difference centers on the availability of billets.

Senior Reserve Officers

In APPLY senior reserve officers are defined as those in the paygrade of O5 and above. This APPLY group also includes junior reserve officers (O4 and below) applying for Commanding Officer positions for a given reserve unit. One item to note here, there are more senior reserve officers than billets available; therefore, not all senior reserve officers are assigned billets.

Junior Reserve Officers

Prior to FY08, junior reserve officers were assigned locally at Naval Operational Support Center (NOSC). There are an abundance of billets available for junior reserve officers, leaving many billets vacant after slating is complete. JOAPPLY follows a monthly schedule for slating.

Since there are fewer senior reserve officers billets available, policy has authorized the convening of the “APPLY Board” [3]. This APPLY selection board consists of a panel of senior Active Component and Reserve Component Officers (H. Romagosa, personal communication, January 24, 2008). Board membership consists of Commanders and Captains with a Flag Officer as the Board President. The selection board’s objective is to find the best Officer/Billet match and the process used to do so is explained below.

1. Access to APPLY/JOAPPLY

Reserve officers access APPLY via the web, <https://apply.hq.cnrf.navy.mil>. Once logged in, numerous options are available to assist in the management of the officer’s personnel record. For the first time user, the first action required is registration.

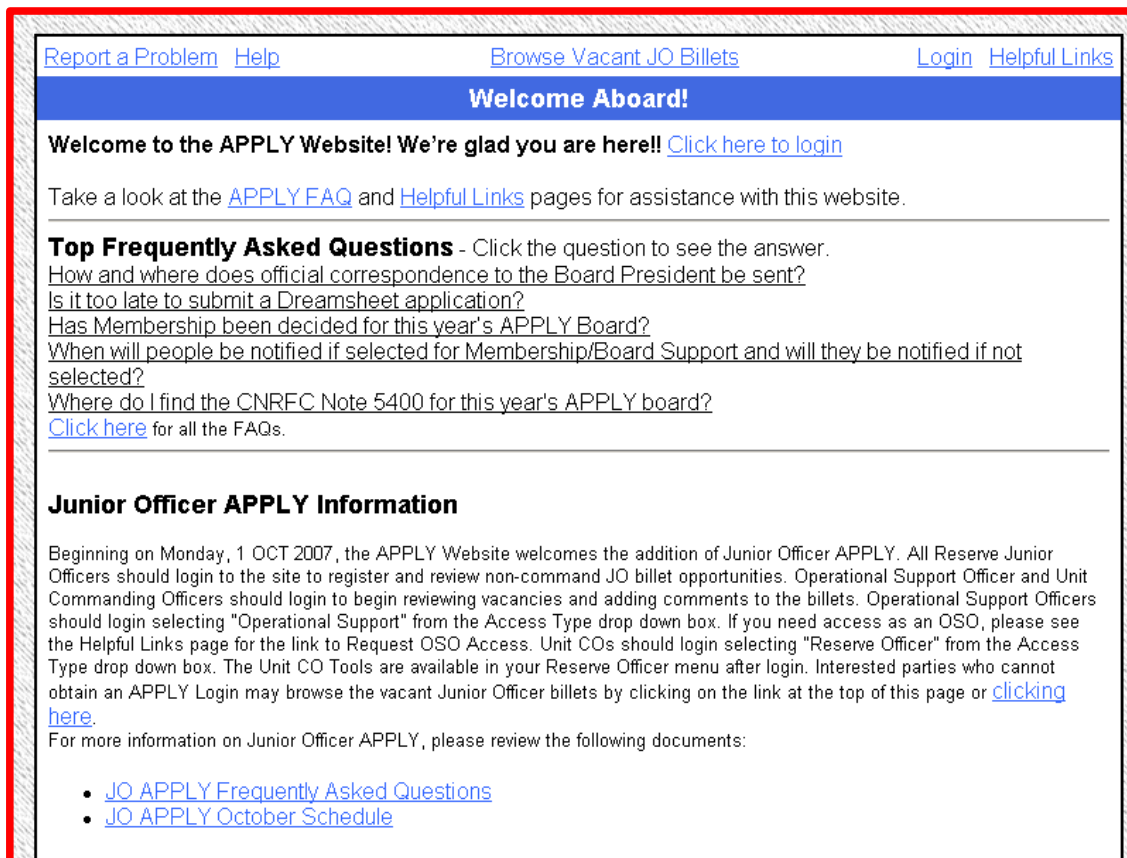


Figure 2. APPLY Webpage from <http://apply.hq.cnrf.navy.mil> from [17]

Figure 3. APPLY Log-in Page from <http://apply.hq.cnrf.navy.mil> from [17]

2. Registration

Registration is a tool that aids the assignment process. It brings the reserve officers (user) into the process of data validation. The more accurate the information within the Reserve Headquarters System (RHS) database, the more efficient the process will be. Registration verifies the officer's personal information, current and past assignments, Projected Rotation Date (PRD), qualifications, etc. If there are errors with the information, that Officer may not be accurately considered for a career enhancing job [4]. Since there currently does not exist a one stop location to remedy the noted discrepancies, a contact list is available on the APPLY webpage. In short, the reserve officer would have to contact the activity that is responsible for the modifications to that particular database system. This practice suggests a shared responsibility of the individual's record by the service member and the Reserve Force administration.

Registration provides an extra quality assurance level that should reduce most errors. One source of error that registration helps reduce is the advertisement of the wrong billets. Since billet advertisement is triggered by the reserve officer's PRD, a check by the reserve officer could contribute significantly toward the reduction of incorrect billet advertisement. If a reserve officer is in a billet where the PRD is set to expire at the end of the fiscal year, that reserve officer's billet will be advertised and

made available for selection in the upcoming selection cycle. After completing the registration, the reserve officer can then move on to the billet selection phase.

The Registration link provided on the APPLY webpage allows the reserve officer the opportunity to assist in their record maintenance. The Personal link allows for review of information contained in RHS. This information can normally be updated at the NOSC during a drill period.

The Current Assignment link displays current assignment information retrieved from RHS. Discrepancies are addressed at the NOSC. From the Current Assignment link, the reserve officer can verify the assignment to a billet. The important aspect to note with the current assignment is the corresponding PRD. As previously mentioned, the PRD triggers the advertisement of billet on APPLY. An inaccurate PRD would affect the reserve officer's status in a particular billet.

The Billet History link is mostly for the assignment authority. When considering future assignments to a billet, the prospective reserve officer's historical snapshot of billet history gives credibility to his/her experience. The reserve officer has the option to input the billet history and civilian work history directly into the system. Completeness and accuracy is important, for the APPLY board members do not have access to the Officer Summary Record (OSR) or the Performance Summary Record (PSR) while slating.

The Qualification link provides the assignment authority the remaining information that is used to decide who will be assigned to a particular billet. Awards received and security clearance levels are examples of the type of information available via this link.

Following registration, reserve officers can view the available jobs lists and submit their request. In order to apply for billets, the reserve officer must meet one of the following conditions: a) be within twelve months of their PRD, b) have an expired PRD, or c) be in an In Assignment Procession (IAP) status. The reserve officer is allowed up to 35 billet requests (J. Fifield, personnel communication, September 19, 2007). Again this highlights the importance of the reserve officer's PRD in this process.

3. User Roles within APPLY/ JOAPPLY

a. APPLY

The user roles in APPLY are Reserve Senior Officer, Reserve Unit Commanding Officer (CO), Operational Support Officers (OSO), and the Reserve Force Staff. Even though the roles are interconnected, the roles are unique.

The Reserve Senior Officer is a reservist who drills at a particular site. Normally, this reserve officer's paygrade is O5 and above; however, in unique situations this group includes some O4 and below paygrades. These junior officers are those officers seeking Commanding Officer type jobs.

The Reserve Unit CO is a reservist who drills at a particular site and commands a reserve unit. One of the many Reserve Unit CO goals is to coordinate with the NOSC to man their units to 100%. In addition to working with the NOSC's personnel department, reserve unit COs can provide inputs directly on the individual billets within APPLY. Once logged into the APPLY website, the Reserve Unit CO has the ability to comment on any billet assigned to their unit or subordinate units. The purpose of these comments is to convey additional relevant information to APPLY board members that will aid the board in making the best selection for a particular vacant billet.

The Operational Support Officer (OSO), as a member of the active component staff, is the primary liaison between the active command and the reserve unit. Within the APPLY website, the OSO can also add comments to the reserve billet descriptions. When OSOs and COs enter comments on a billet, the comments are visible to browsers, applicants, OSOs, COs, and detailers. However, when an OSO makes remarks on an individual's application, only OSOs and the detailer can see the remarks (M. Whitfield, personal communication, January 25, 2008).

Commander, Navy Reserve Force Command (CNRFC) is the convening authority for the APPLY board. CNRFC (N12) department is responsible for the execution of the APPLY process. For the junior reserve officer –JOAPPLY, the OSO, in coordination with CNRFC (N12), accomplishes this function.

b. JO APPLY

The roles in JOAPPLY, as described in the Reserve Junior Officer Interactive Detailing (RJOID) Functional Requirements Document, are RC Junior Officer, RC Detailer, RC Program Manager, and RJOID Manager. As stated with APPLY, each role has distinct functionality associated with them.

Junior Officers are reservists whose paygrade is O4 and below. These reserve officers are seeking the more abundant reserve billets that are available within the Navy Reserve Force. These are non command billets, as opposed to those vying for command billets work within the APPLY process.

The RC Detailer is more of a cooperative working relationship between CNRFC N12 staff and the OSO rather executing the job as individuals. Detailer is a term used in the RJOID Requirements Document, but in practice, Assignment Coordinators are used. RC Program Managers are CNRFC N12 staff personnel. RJOID Managers are also carried out by CNRFC N12 personnel.

As with any process, APPLY has its shortcomings. Following the APPLY board; vacant billets may still remain throughout the year. Vacancies will occur for various reasons. In their capacities, OSOs act to approve intermediate fills for vacant billets. This proves to be the most prudent action to take, because the OSOs have a firm understanding of the active command requirements. This short-term response to vacancies prevents a billet from remaining unfilled until the convening of the next APPLY board. Additionally, the OSOs handling of vacancies is a cost-saving mechanism for the reserve force; it removes the need to convene a special APPLY board. Another alternative would be to leave the billet vacant until the next board cycle. For junior officers, the assignment process has a monthly cycle, while for senior officers the APPLY board convenes annually.

4. The APPLY Process (Senior Officers)

a. APPLY (FY08) TIMELINE

- **31 Mar** – Board membership and support applications due.
- **11 Apr** – ESC selects membership.
- **1 May** – Billets advertised for review only.
- **18 May** – Deadline for Billet assignment /PRD extension.
- **18 May** – Deadline for Echelon IV, V, VI assignment / PRD review
- **31 May** – OSO “Comments” input and validation.
- **15 Jun** – Application begins. Billet File Frozen
- **31 Jul** – Application updates/dream sheet submission ends.
- **26 Aug** – FY08 APPLY Board begins.
- **31 Aug** – FY08 APPLY Board adjourns.

b. The Process

As indicated in the timeline above, reserve officers have a limited amount of time to make billet requests. Once that time expires, the application process for billets is closed for board preparation. The current selection board process starts with the precept. The precept is the instruction from the Chief of Naval Personnel to the board president defining the board’s membership, date, location, and function. It also establishes board eligibility by minimum qualifications for selection, disqualifying criteria, and the board opportunity plan. The board team consists of the following: President, who is the senior member and is charged with conducting the board; Members, who are responsible for the actual review, briefing, and voting of records; and Recorders, who check records for completeness.

Before the convening of the board, Recorders scrub all records eligible for the board for completeness. Once the board convenes, records are distributed to board members randomly for review and brief preparation. Items reviewed in particular are all fitness reports (FITREP), Officer Summary Record (OSR), and Performance Summary Records (PSR). These records form the basis for comparison of the eligible records. It

includes trait averages compared to the Commanding Officer's summary group and competitive group averages, qualifications, personal awards, educational milestones, etc. Once all records are reviewed and prepared for brief, board members brief their records in the "Tank." In the Tank, records are displayed on large screens for the ease of each board member. Each seat has a voting handset which allows the board members to cast confidential votes: Yes/No votes (100 for yes, 0 for no) or confidence level votes (100, 75, 50, 25, and 0%).

Once all votes are cast, a scattergram of the votes is displayed. The scattergram is a basic graph of all possible scores against the number of records scored. It provides a rank order list of the records by confidence level, thus providing cutoff points for use in making the decision. In the APPLY board, once the rank order list is determined, the Board moves to the next phase of the APPLY Board, Slating.

The slating phase is where the actual assignment of a reserve officer to a billet occurs. The confidence factor is used to rank order the reserve officers. Even though the confidence factor determines the order to which the reserve officers will be considered for assignment to a billet, it does not guarantee that this reserve officer will necessarily receive his/her first choice.

When reserve officers are selected for placement, their first choice for a particular billet is presented. Next, a query is conducted that lists other reserve officers, who also selected this particular billet as their first choice. A side-by-side comparison is conducted that aids the board members in considering all the information presented.

Figure 4 provides a physical layout of slating location.



Figure 4. Slater Tank from B. Head, October 16, 2007

If there are specific comments concerning the billet of the reserve officer, these comments are reviewed at this time. The Slater Applicant Grid (Figure 5) provides the means to present the applicant and detailed review of his record. When the “Applicant Detail” button is selected, another panel is presented that displays information pertaining to that reserve officer. The panel should expect to see the applicant’s name, designator, time in rank, security clearance, along with other personal information.

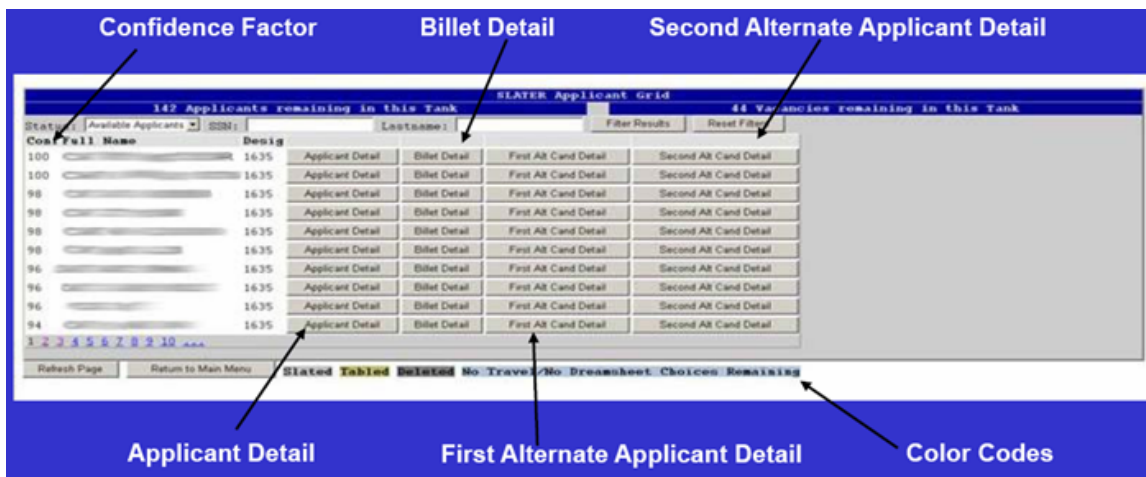


Figure 5. Slater Applicant Grid from B. Head, October 16, 2007

Along with billet information, there is information indicating how much time remains before the reserve officer's billet assignment expires. The amplified information provided includes the comments from the reserve officer, as well as the OSO and Reserve Unit CO. Lastly, the reserve officer's dream billet requests are listed in his order of precedence.

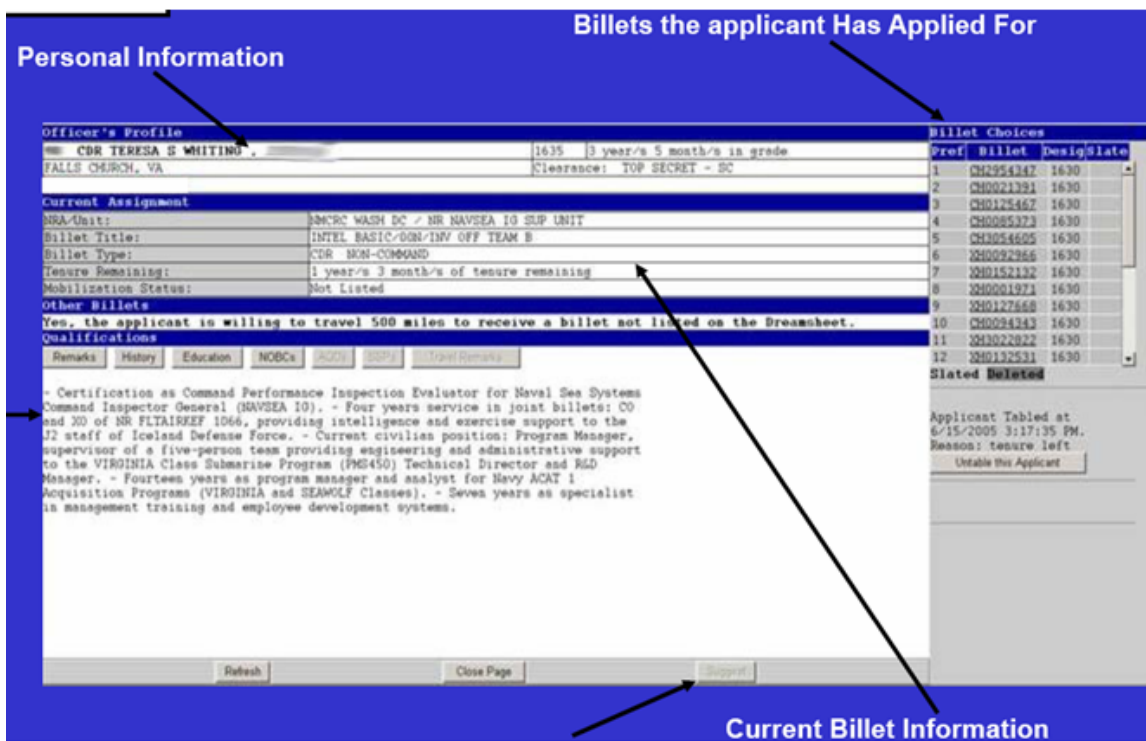


Figure 6. Slater Applicant Detail from B. Head, October 16, 2007

When the “Billet Detail” button is selected, information is displayed from the perspective of the billet. Now the billet details are presented indicating the requirements for the billets. Additional comments are displayed that would not otherwise be captured by the billet structure fields. Also, a list of reserve officers who requested this billet is displayed in confidence factor rank order. Amplifying information is provided indicating where the individual ranked the particular billet among his choices. For example, this billet was the first of five billets selected for a reserve officer; whereas for another reserve officer, this billet was fourteen out of twenty-seven. This information is depicted in Figure 6.

Billet Specifics

Confidence Factor

Applicants Who Have Applied for the Billet by Confidence Factor

Billet Profile

Billet Description/Location

Title: INTEL BASIC-DOUG
 Units: 3RD COMNAVRESINTCOMHQ 0170
 Command Type: 2-01
 Number: 300001984

Unit: NAS FT WORTH
 AUC: CHAVRES INT COM
 Reserve Program: INTELLIGENCE (17)

Billet Specifications/Requirements

Design: 1630 Rank: CAPT
 Pri: INTEL BASIC Sec NOBC: NOT LISTED
 NOBC: (9600)
 Pri: NOT LISTED Pri SSP: NOT LISTED
 ADD: 1: 10 VERTICAL SUB
 RFAS: CR: 1630, 6450, 7450
 Drill Location: NAS JRB Fort Worth
 Weekday Drill:
 Drill Frequency: Monthly
 Security Clearance: TS/SCI

Comments

Supported Command Commanding Officer
 Name: COMNAVRESINTCOM
 Location: NAS JRB Fort Worth, TX
 Mission: Management of the Naval Reserve Intelligence Program
 Deputy Chief of Staff for Information Technology (IT)

27 Applicants Remaining

Conf	Rem	Name	Design	State
1/5		CAPT. FARMER	1635	C
5/12		CAPT. ALLEN	1635	C
6/11		CAPT. SS. DODD	1635	C
11/35		CAPT. SS. SCOTT	1635	C
1/33		CAPT. SS. PRATT	1635	C
11/20		CAPT. BURROUGHS	1635	C
14/27		CAPT. SS. KELLEY	1635	C
24/34		CAPT. SS. MURPHY	1635	C
12/30		CAPT. KILLION	1635	C
32/33		CAPT. DOMERACKI	1635	C

Noted Tabled Deleted

Select an applicant from above or type in the SSN:

State Clear Fields

Refresh Close Page Suggest

Note: This is where the Panel can see all the applicants who applied for the billet and their confidence factors. It will

Figure 7. Slater Billet Detail from B. Head, October 16, 2007

For the Board, knowing where reserve officers ranked particular billets on their personal preference list assists in billet placement. If the reserve officer has a billet at the bottom of his list, this may suggest that the member was not particularly interested in this billet even though he was the best match for the billet. When looking at the best

match between the member and billet, a member with low interest in a billet may not be the best fit billet. Qualification, in this particular case, may not be the determining factor.

Following the analysis, the driving factor for the billet selection is the best match for the billet, not the highest confidence factor. If the reserve officer with the top confidence factor is not slated to his first choice, this iterative process continues until the reserve officer is slated or until all of his choices have been exhausted. The board then performs the same process for the next candidate.

5. Post Apply Board Requirements

Following the adjournment of the APPLY board, CNRFC (N12) compiles the results and makes them available to the reserve officers. Once the billet selections are published, the reserve officers have a short period of time in which they have to either accept or reject the billet. As previously mentioned, following the accept/reject period, a few billet vacancies may exist. At this point CNRFC (N12) works with the OSO to assign an interim fill for that particular billet for a one year tenure. Normal reserve billet assignments are for three years. However, if a member is filling a Commanding Officer billet, then that reserve officer's tenure is two years. Due to the unique rules for some designators, this general rule will differ. See Figure 8 for the AS-IS view of the APPLY process.

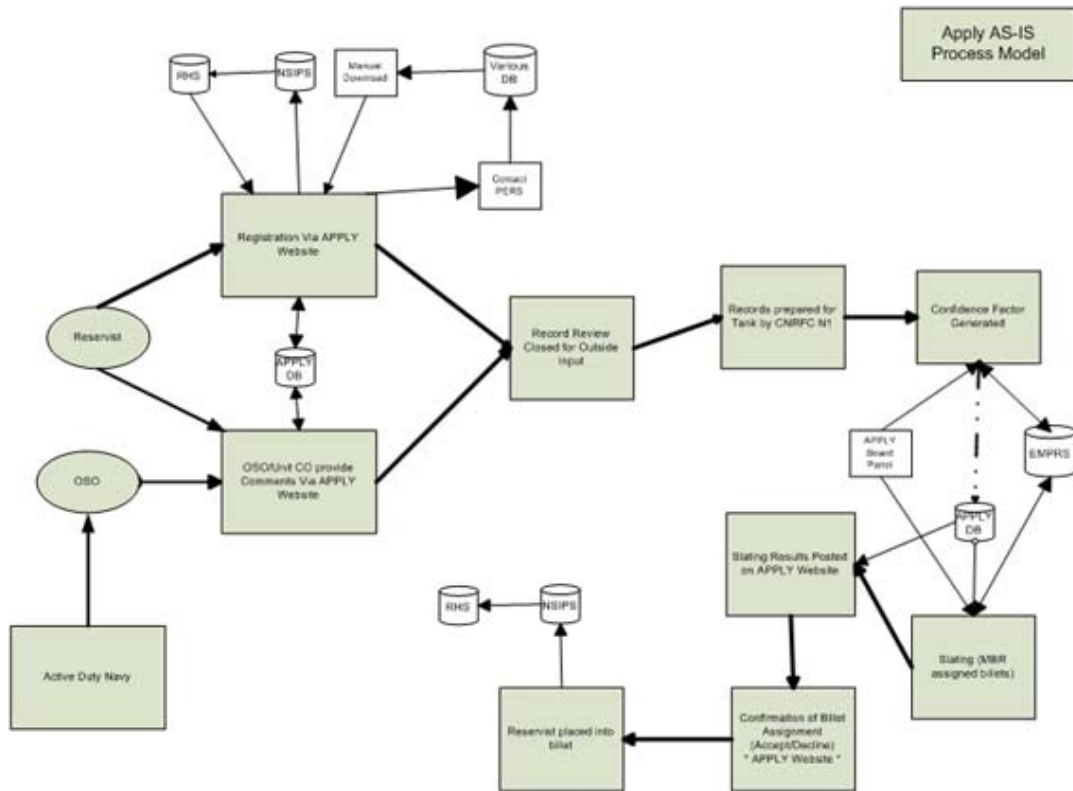


Figure 8. APPLY AS-IS Process Model for the Senior Apply Board

6. The JOAPPLY Process

JOAPPLY is similar in nature, but different in function, from the APPLY process. Since there is a surplus of junior officer billets, JOAPPLY does not require a selection board. Billet assignments are not made by a panel of officers, but instead by a designated few. These decision authorities, called Assignment Coordinators, must ensure they understand the requirements, because their tasks are just as important as the deliberation returned from the APPLY board. To aid the decision maker, record reviews are still conducted and qualifications are presented to support the matching of the reserve officer to the billet.

JOAPPLY operates on a monthly cycle vice APPLY's annual cycle. As indicated in Figure 9, each phase of the JOAPPLY monthly cycle occurs at defined times. These functions are carried out by the different role players. In the monthly cycle, JOAPPLY is

available for commands to make billet comments for one week. The next two weeks, junior officers are able to submit applications for billet requests. Following the application submissions period, JOAPPLY is available for command comments on applicants. During the last week, Assignment Coordinators make the assignments.

As with APPLY, a detailed comparison is performed within JOAPPLY. Junior Officers are compared to billets, billets are compared to junior officers, and applications are compared to junior officers. Even though this process is not conducted in the formal setting of a selection board, the process still occurs. When all is done and the analysis is complete, the assignments are made.

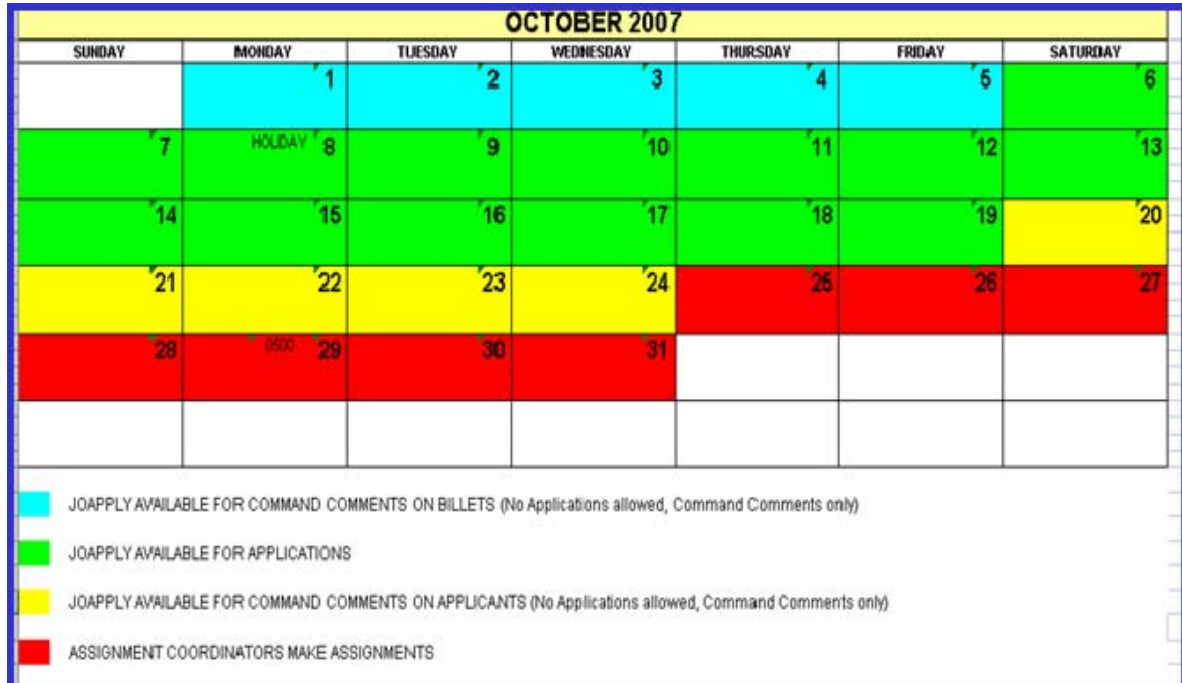


Figure 9. JO APPLY Monthly Detailing Schedule from [17]

7. Order Generation

Following the APPLY board, the Reserve Component Commands (RCC) were tasked with drafting and issuing orders to the APPLY Selectees. In the past, this function was pushed down to the NOSC. Having individual NOSCs generating orders introduced

non-uniformity across the Reserve Force because each region added their uniqueness to the order issuing process. With the introduction of the IDT Orderwriter, the generating orders became centralized. The IDT Orderwriter is the application used to generate and modify reserve IDT orders. NOSC's now only have to access the Orderwriter and retrieve the selectee's orders. The Orderwriter also provides a variety of research tools that allows the user to research the history of a billet or a person.

With the orders in hand, the NOSC only has to make the U.S. Navy Standard Integrated Personnel System (NSIPS) entries. NSIPS is a personnel system which affords the sailor 24 hour access to his/her personnel records. The NSIPS assignment is made following acknowledgement from the reserve officers as to whether or not they have accepted the billet. These same orders are also available to the reserve officers. Orderwriter also provides visibility to the higher echelons. It presents a picture as to whether or not the NOSC's had assigned the APPLY selectee to the appropriate billet.

8. Other APPLY Facts

Currently APPLY access does not require Common Access Card (CAC)/ Public Key Infrastructure (PKI) credentials, but it is only a matter of time before it will have to meet this requirement (M. Whitfield, personal communication, January 11, 2008). The advantage of not complying with the CAC/PKI requirement is the multiple location possibilities that exist for reserve officers to access the APPLY website.

D. CAREER MANAGEMENT SYSTEM/ INTERACTIVE DETAILING (CMS/ID)

CMS-ID is designed as a total force, web-based tool used by Active Duty, Full-Time Support (FTS), and Selected Reserve (SELRES) Sailors receiving GEO-location, sailor rotation and order status data from the Enlisted Assignment Information System (EAIS). It is designed to give Sailors and Commands the ability to identify the best job for the Sailor and the best Sailor for the Command. CMS-ID provides a bridge between existing legacy distribution systems (see Appendix A) and the Career Management System functionality of Sea Warrior. Sea Warrior is the human resource component to

Sea Power 21, with one of its goals being to ensure that the right skills are allocated in the right place at the right time [2]. CMS-ID provides Sailors the ability to search for available assignment opportunities and to communicate directly with their Detailers.

CMS-ID evolved from the Job Advertising & Selection Systems (JASS) Career Management System (JCMS). JCMS was designed to enable sailors and commands to identify the best job for the sailor and the best sailor for the job/command. JCMS is a web enabled JASS system enhanced with modifications that enables sailors to make better decisions when looking for that next assignment [5]. Given the evolution of JCMS to CMS-ID, the exponential growth in Information Technology (IT), and the nearly endless number of connections to the internet, the interoperability of CMS-ID increased. The rapid growth in IT, and the other changes mentioned above, produced both benefits and consequences. The main consequence for CMS-ID was the need to require restrictions that limited a sailor's access to the system.

The goal of CMS-ID is to streamline detailing, personnel distribution, and career management tools by providing robust web-enabled functionality. Offering a one-stop-shop atmosphere, CMS-ID enables sailors and their families to easily research and apply for open jobs that meet the needs of the Navy (D. Pellinen, personal communication, January 11, 2008).

CMS-ID accomplishes this by first centralizing the detailing process for enlisted sailors. No longer does each Reserve Center exercise its own interpretation of billet assignment policy. All sailors now have access to similar billet information relative to their specific rating.

CMS-ID retrieves its information from various legacy database systems. The connections to the many database systems allow access to the information that supports the placement of enlisted sailors, both active and reserve, into vacant billets.

Access to CMS-ID requires that the Sailor use a secure site. Even though the Sailor can navigate through the Navy Personnel Command webpage, a more direct link is

<https://www.npc.navy.mil/Enlisted/CMS>. The Sailor can also access CMS-ID via Navy Knowledge online (NKO). Once logged into this secure site, the user can view billets, etc.

CMS-ID is available to all Active Duty, FTS and SELRES. CMS-ID uses the sailor's social security number (SSN) as his/her user login, and a password for authentication. Current restrictions placed on the CMS-ID website require the use of the PKI certificates. This is accomplished via the CAC.

Once the sailor has logged into CMS-ID, the following options are available: update personal information, review available job listings, review comments from the Detailer, and post comments or questions for the Detailer. Within CMS-ID there are also milestone checks that are unique to a sailor. These checks are presented in the form of "Alerts" and "Notifications." The "Notifications" vary in nature from requests to complete the Duty Preference Forms to informing the sailor that he/she is within six months of his/her PRD (D. Trask, personal communication, January 11, 2008).

The tabs available on the Graphical User Interface (GUI) are Preference, User Profile, Job, and Personnel. The Preference and User Profile tabs require an annual update. The Job tab allows the sailor the opportunity to view various job opportunities and make his dream sheet request. Five jobs can be viewed and compared at a given time. The Personnel tab is a real-time snapshot of the information included in the sailor's service record that affects billet eligibility. The following is a partial list of the information available in the Personnel tab [5]:

- Perform to Serve (PTS) Status
- PTS Rack Date
- Security Clearance Eligibility
- Security Clearance Investigation Complete Date
- Security Clearance Access
- Security Clearance Review Date
- Exceptional Family Member (EFM) Category and EFM Review Date (if applicable)

CMS-ID is not only a tool for the sailor. Other user roles exist within CMS-ID include Career Counselors, Command Representatives, Detailers, and the System Maintenance personnel.

The Command Representative's role has visibility of a variety of information pertaining to open billets in their command. Command Representatives can track the status of prospective gains and losses [5]. In CMS-ID the Command Representative is allowed the opportunity to place comments on their open billets to which sailors have applied. These comments are visible to the Detailer and aid the Detailer in making the best selection for the Command. Having access to the specific requirements of a particular billet allows the Detailer to make a more informed decision, thus providing a better opportunity to place the right sailor in the right billet. CMS-ID offers additional functions for the Command Representative. If a particular command has multiple subordinate commands, the Command Representative would have the visibility of billets assigned to its subordinate commands. This visibility of the subordinate units allows for continuity of the detailing process when a particular command may not have connectivity. Also with the volume of information available, this practice keeps the detailing process at a manageable level for a given entity.

The Command Representative could specify unique requirements, which may not be conveyed by just viewing the billet. For example, a command has a Yeoman First Class (YN1) billet that is vacant. But in this case there are unique requirements associated with this YN1 billet for a particular command. This billet requires that the sailor to travel frequently to various locations and the sailor must possess a Top Secret clearance prior to arriving onboard. Now, YN1 candidates who are surveying the available billets would not see such information, but the Detailer would.

The Personnel Summary tab provides a historical snapshot of a Sailor's application history throughout the negotiating window. In addition to making comments on a sailor's profile, the command can also rank the sailors bidding for a particular billet. When considering a sailor, the command considers the following information [5]:

- Held Navy Enlisted Codes (NEC)
- Platform type history

- Evaluation / Fitness Report information (No name or SSN)
- Paygrade
- Naval schools attended

Command Career Counselors (CCC) have their own role within CMS-ID. This role allows the CCC to work with outgoing sailors as the sailor plans for his/her next assignment. The CCC has visibility of all sailors under its unit identification code (UIC), to include subordinate commands.

The Detailer brings all the inputs together and compares the inputs from the sailor and the command. As previously mentioned, the Detailer has many tools within CMS-ID to assist in accomplishing the detailing task. Some of the tools available include [5]:

- Security Clearance (Alert)
- PTS (Alert)
- Duty Preference Update (Alert)
- EFM (Alert)
- EFM Expired (Alert)
- Duty Preference Review (Alert)
- PRD Window (Alert)
- Assignment Point Warning (Alert)
- Assignment Point (Alert)
- Detailer Introduction (Notification)
- Hot Job Matches (Notification)
- CNO Priority Billet (Notification)
- End of Pregnancy Tour (Notification)
- End of Limited Duty Tour (Notification)
- Full Duty Screening (Notification)
- Issues Affecting Transfer (Notification)
- Assignment Point (Notification)

Based on the tools and inputs discussed, detailers have the ability to compare sailors. Specifically, the comments from the Command Representative are used by the Detailer to conduct a comparative analysis of the needs of the command and the needs of the individual sailor. Following this analysis, the assignment is made.

CMS-ID is not available in the disconnected environment [16]. CMS-ID is set up to work in conjunction with the JASS client. The relationship between CMS-ID and JASS is scheduled to continue until surface units acquire the required hardware and connectivity resources to access CMS-ID on a 24 hour seven day a week basis (D. Pellinen, personal communication, January 11, 2008).

CMS-ID has moved detailing to another level. CMS-ID reduced some of the tedious, repetitious functions existent in the detailing process by leveraging them with automation. CMS-ID has provides sailors an increased visibility of available vacant billets. In accomplishing this achievement, CMS-ID interacts with various legacy systems. The use of CMS-ID has reduced the number of times the enlisted sailor would have to contact the Detailer or representative in order to obtain the list of potential future assignments. Figure 10 illustrates these connections.

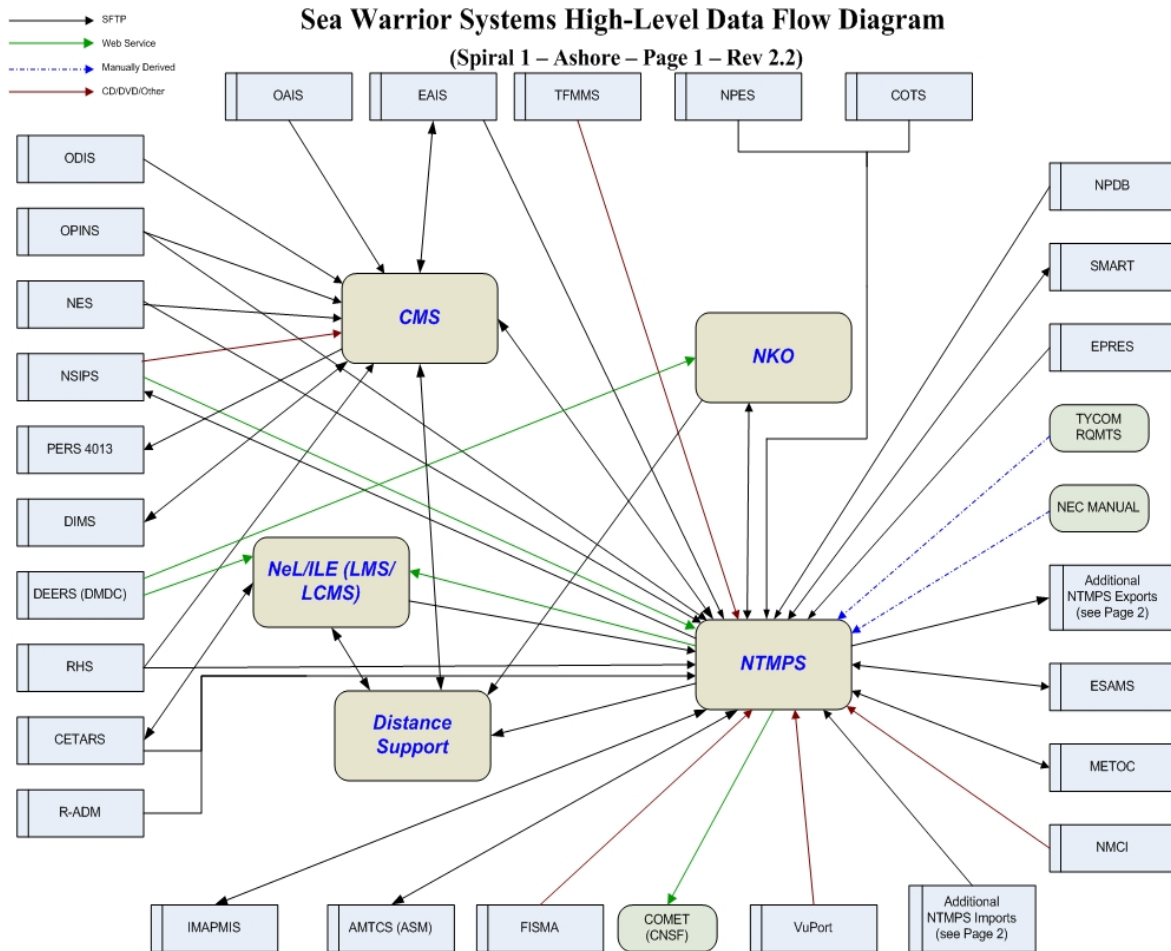


Figure 10. Sea Warrior High Level Data Flow Diagram from D. Trask, December 12, 2007

The CMS-ID detailing process operates on a monthly cycle, where different processes are performed by different role players at predetermined times. For a two week period, the enlisted reservist is able to submit applications for billet request. Following this application period, Commands are allowed the opportunity to add comments. Next the Detailers have a period where they make selections based on the inputs from the Sailors, Career Counselors, and Command Representatives. The cycle concludes with a short record scrub and maintenance period, that ending one cycle and beginning the next.

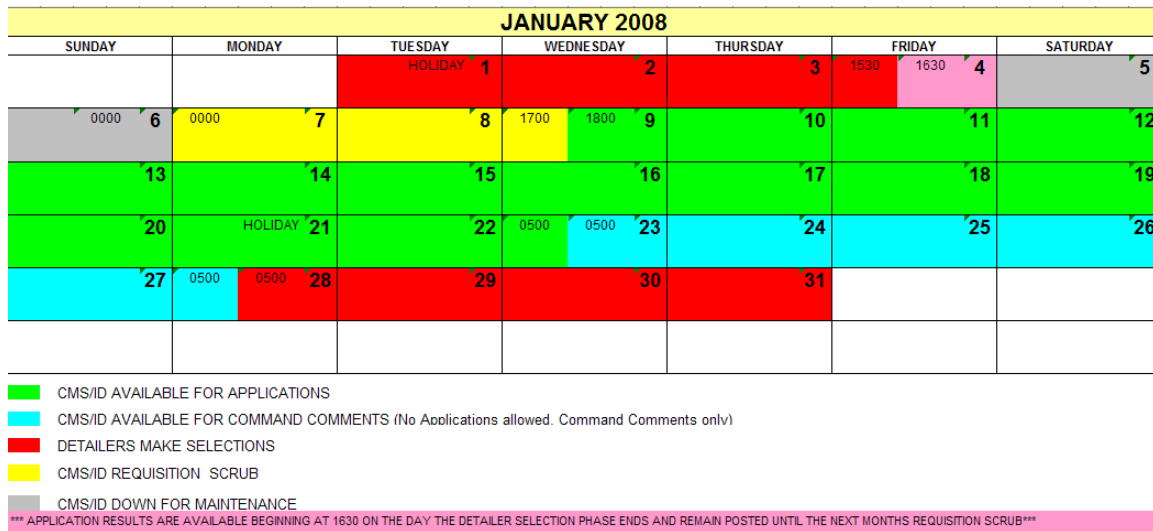


Figure 11. CMS Monthly Detailing Cycle from [18]

Within CMS-ID there are Eligibility Gates and Flags, and automated checks. These Eligibility Gates and Flags perform transparent checks against the Sailor's personnel record. Here CMS-ID automates tasks that were previously performed by humans. This check ensures that the sailor meets all policy requirements for a particular job. Eligibility Gates block the submission of the application; whereas Eligibility Flags do not block, but advise the sailor and Career Counselor of actions required before orders can be generated.

There is other automation built into CMS-ID that aids the detailing process, Policy and Skills scores. Policy and Skills scores use color (green, yellow, and red) indicators to forecast potential obstacles that may exist and would limit the Sailor's ability to be selected for a particular billet.

A Policy Score is obtained by matching current personnel distribution policies to the Sailor's Personnel Record and the requirements of the open job. For the Policy Score, green signifies that the Sailor should not experience any obstacles in applying for this billet; yellow signifies that the Sailor would experience an Eligibility Flag if an application was submitted for that particular billet; red signifies that the Sailor would experience an Eligibility Gate if an application was submitted for that particular billet (D. Pellinen, personal communication, January 11, 2008).

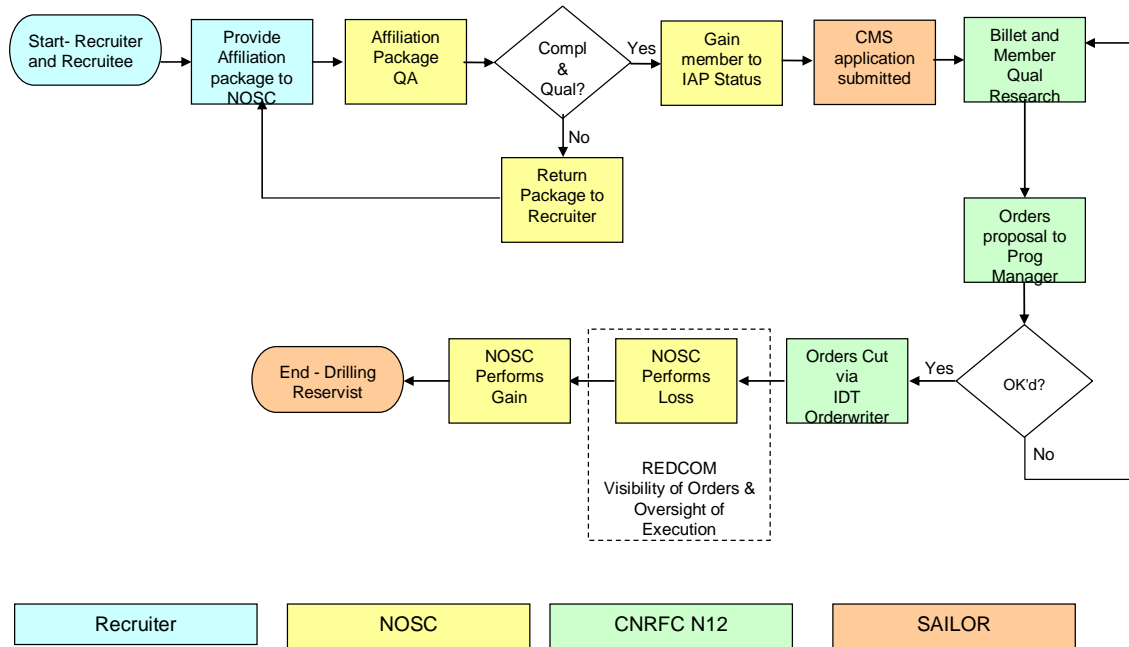
A Skills Score – consisting of Rate, Rank, and Navy Enlisted Code (NEC) – is obtained by matching the current skills listed within the Sailor’s Personnel Record to the skill requirements of the open job. For Skills Scores, green signifies that the Sailor possesses the required Rate, Rank, and NEC; yellow signifies that the Sailor has the correct Rate and Rank, but does not have the required NEC; red signifies that the Sailor has the incorrect Rate or Rank.

There are two approaches to this detailing process: sailors who are detailed from outside of the military (new affiliate) and those detailed from within the military. Those reserve enlisted sailors, who are detailed from outside of the military are accessed via a recruiter. The enlisted recruiting function was once separated, but has since been consolidated with active duty recruiting using the same recruiter.

Once the recruiter acquires all the documents required to complete a package, applicable documents are filed and information is entered into NSIPS. Once the sailor is appropriately entered, a file is created in the database systems to which CMS-ID is connected. This process allows the new affiliate sailor the same opportunity as any other sailor. Figure 12 illustrates the flow of this process.



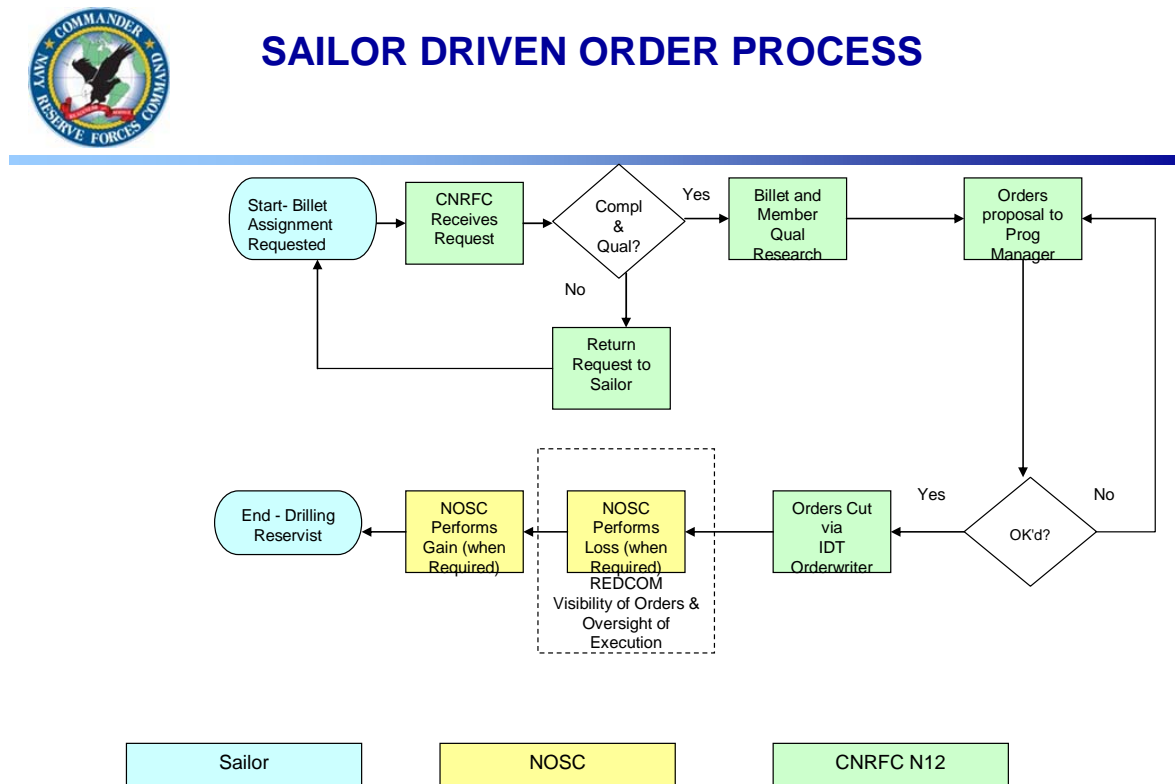
NEW AFFILIATE ORDER PROCESS



16

Figure 12. New Affiliate Order Process Diagram from D. Pellinen, December 12, 2007

For the sailor who is currently on active or reserve duty, he/she already has an active role in CMS-ID. These sailors can perform the functions previously mentioned as illustrated in Figure 13.



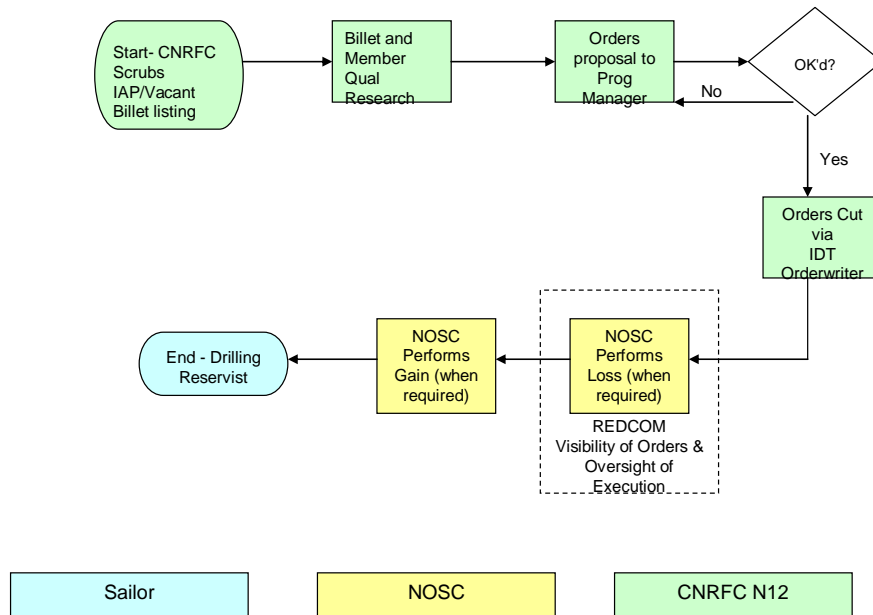
18

Figure 13. Sailor Driven Order Process Diagram from D. Pellinen, December 12, 2007

The Reserve Detailer also takes a placement officer point of view. In doing so, the Detailer analyzes the vacant billets and strategizes how to best fill the vacancy. Figure 14 illustrates this process.



BILLET DRIVEN ORDER PROCESS



20

Figure 14. Billet Driven Order Process Diagram from D. Pellinen, December 12, 2007

E. NAVY-MARINE CORPS MOBILIZATION PROCESSING SYSTEM (NMCMPs)

1. Purpose.

The United States Navy manages its manpower resources under peacetime conditions to maximize the readiness of the total force. NMCMPs is a web based tool that streamlines the mobilization of the reserve forces, captures mobilization related data in a single system, and provides all stakeholders with end to end visibility of the process [6]. Designed by Ideamatics, Inc., NMCMPs is broken down into five separate modules (Mobilization Processing Module, Sourcing Module, Order Writing Module, Augmentation Management Module, and Requirement Tracking Module), which when

combined, enables Naval Personnel Command to collect data on the mobilization of service members at all steps of the process, from the moment an order is created to the point at which the individual leaves the mobilization center for active duty. Each module will have a brief description later in this section.

NMCMPS was developed in response to the identified requirement to track service members throughout the entire manpower mobilization process. It supports the Navy Mobilization Processing Sites (NMPS) in the processing and tracking of service members. NMCMPS is used to capture, store, and retrieve information on each mobilized service member (active and reserve) and retired service member from the moment the service member reports for duty through the time the service member arrives to the gaining command.

NMCMPS is organized into three operational functions: maintaining data on NMPS processing of service members, generating reports, and executing utilities for database administration. NMCMPS requires only a supported internet browser for local processing and is designed to operate on equipment available at every NMPS and Navy Reserve Activity (NRA). NMCMPS uses a SQL Server 2000 as its database management system, with a GUI. Access to NMCMPS is via Bupers Online (BOL), where service members or administrators at the NRA or NMPS enter initial processing information and establish the mobilization account.

This does not hold true for the Requirement Tracking Module which is accessed via a secure site called Navy Manpower Online. Initial data for the NMCMPS database comes from the Naval Personnel Database (NPDB) or the Order Writing Module. Each NRA updates the NMCMPS database when a service member reports to the site for mobilization. NMCMPS provides real time data which is updated automatically from the NPDB and the Order Writing module. NMCMPS uses several tables for data entry validation. Changes are made to the information maintained on each mobilized member who passes through the NRA and NMPS. These changes are made through manual data entry. NMCMPS related data maintained in the NPDB has precedence over the NMCMPS database.

Inputs to NMCMPs are (a) personnel data from the NPDB and Order Writing module, (b) manually entered data used to track service members through the NRA, and (c) manually entered data used to track the service members through the NMPS. The outputs are (a) displayed information showing the data applicable to each member and (b) reports giving rosters, lists and statistics in either printed form or on a computer disk file.

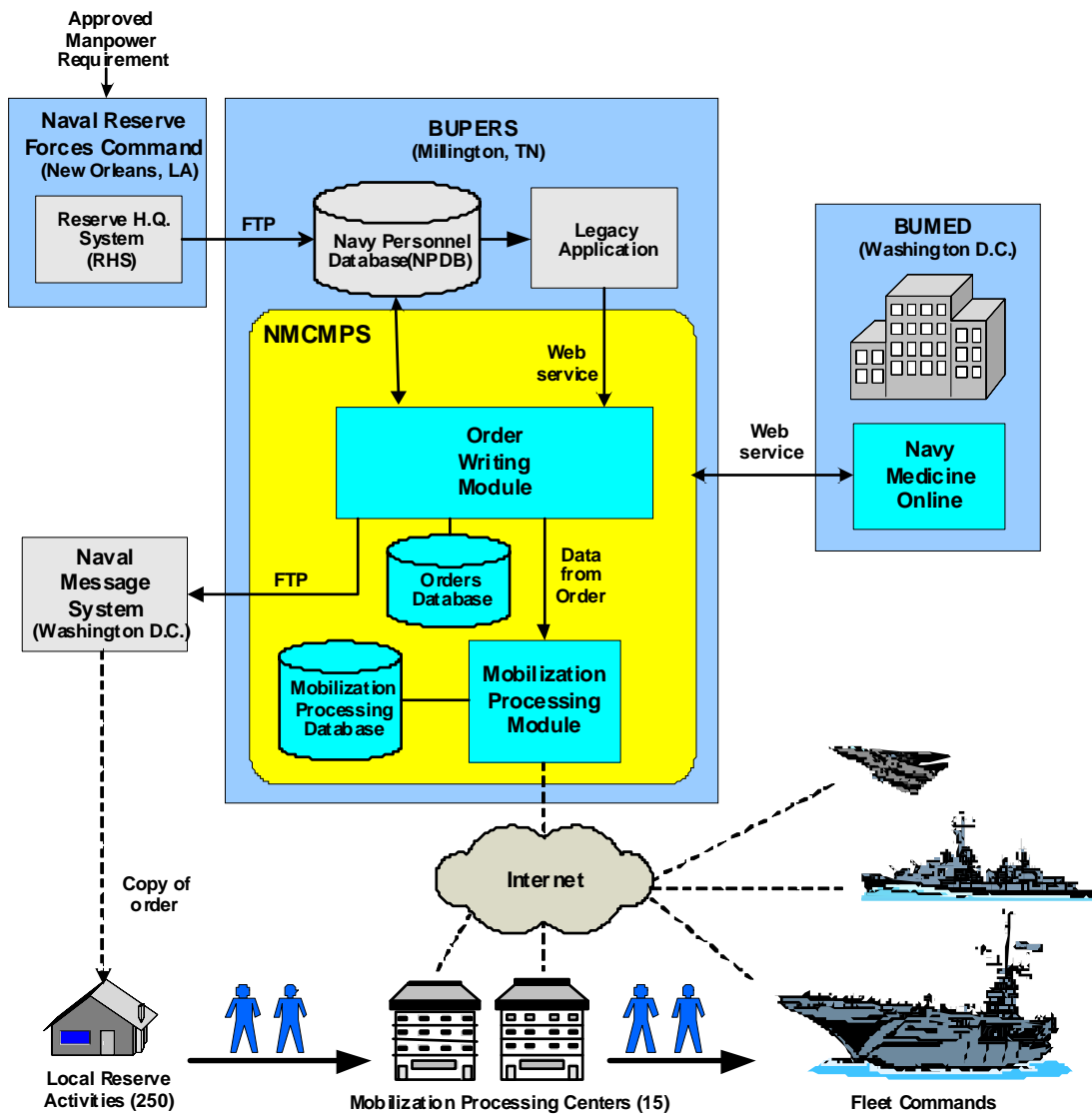


Figure 15. The NMCMPs Diagram from [6]

2. Module Description

The following is a description of the five NMCMPs Modules:

a. Mobilization Processing Module (PM)

Access to the Mobilization Processing Module (PM) is via BOL. The PM displays the browser page from which you can search for and process service members for both mobilization and demobilization. The PM has a group feature that allows the user to update data for more than one member at a time. The user is defined as any of the following depending on the context: the administrative personnel entering data at the NRA or NMPS, gaining command personnel tracking the mobilization, or the losing command. The user can assign a member to a group and then make global entries to data fields for all members assigned to that group. The group feature is limited to processing 200 records at one time.

Within the PM, there is access to the Notification/Interview Checklist Module. This stand alone module contains a data-driven list of questions and instructions that make-up the interview that needs to be provided to each service member prior to mobilization. Also from the PM the user can generate reports. There are many standards reports available for view as well as the ability to create an ad hoc report (a custom report).

b. Sourcing Module (SM)

Access to the Sourcing Module (SM) is through BOL. It provides a web-based solution to select and assign members, both active duty and reservists, to fill manpower requirements and to request that orders be processed for these assigned members. In addition to facilitating the identification of personnel sourcing, the functionality of the SM coordinates the identification of mobilization events and the activation to those events for the orders generation process.

Sourcing flow includes two main activities: (a) assigning members to fulfill requirements and flagging the assignment with a mobilization event, and (b)

activating or “lighting” mobilization events to provide the required Implementation event message for generation of mobilization orders for selected service members.

Within the Sourcing Module, there is an Assignment page that is used to view or modify specific information regarding a requirement. It is comprised of a sourcing information section, a requirements tab, reporting instructions tab, and a sourcing history tab. The sourcing information group box allows you to search for a specific member by Social Security Number (SSN). If a member does not currently exist within the NCMCPS database repository, the member’s SSN is dynamically added through the on-line interface between the NCMCPS database and the NPDB. If the member is not in the NPDB, then the member cannot be sourced in NCMCPS. The automated Data Transformation Service (DTS) established between the NPDB and NCMCPS transfers necessary personnel information for the Sourcing Module.

The Requirements Tab displays detailed information about the requirement selected. This may also include information about a requested service member and additional tasking information. The reporting instructions tab displays instructions entered into the Navy Requirement Tracking Module. This information cannot be edited through the sourcing module. The Sourcing History tab lists all members who are or have been assigned to a selected requirement.

When sourcing a requirement, business rules require the user to assign a member to a valid requirement tracking number, to enter start and end dates that are within the member’s current orders dates. Dates must not overlap for a particular requirement for a two members by more than 30 days, and a member may not be assigned to two different requirements simultaneously. Also, error messages display when trying to source a requirement with a member that does not meet the pay grade requirement.

c. Order Writing Module (OWM).

The Order Writing Module is a web based application fully integrated within NCMCPS. It is an order generation tool used to process Mobilization, Demobilization, Modification, Transfer, and Cancellation orders. The OWM also

provides a scalable web based application with a central repository to store mobilization events and orders information. It provides the ability to trace all orders generated for mobilized Service members. Additionally, the OWM provides essential management for maintaining direct lines of communication with mobilized Service members by tracking contact information, command information, and conversation logging. Before orders for mobilization are generated, eligible members must be identified through the NPDB synchronization process. The OWM receives its information from the Data Transfer Service established between the NPDB and NCMPS, which refreshes on an hourly basis. Specific templates are available to match the specific types of orders needed. These templates are constructed and stored in a template library to provide high reusability for orders that are similar and frequently used.

Like the previous modules discussed, it is accessed via BUPERS Online and the Navy Marine Corps Intranet (NMCI). Once inside the OWM, various features are incorporated for ease of managing records of the mobilized Service member.

In the OWM contact page there are many features available that are similar to items used in typical detailing, to include updating personal information, command information, duty preferences, orders history, and activity associated with each member. Users can browse to view and edit information about Service members including address, command, and preferences information. The user can also view a summary of contacts with the Member as well as view the Member's order history. Also, the system records comments from contacts with the member, as well as provides a means to search, review, and edit prior contacts with the individual service member.

The Order Processing component of the OWM enables the user to create, validate, and submit, order requests, as well as view and edit existing order requests. Active Duty orders can be processed from the OWM. When processing orders, the user can search for and view order requests and also add new order requests for Members found in the NPDB database. OWM also allows the user to create and update a group of order requests for multiple Members, and allows the user to process multiple order

requests at one time. It also allows the user to swap requirements for Members that are sourced during similar time frames. The option is also available to have a historical view of all orders associated with the Member.

Other features of the OWM are the ability for the user to generate reports; search for order templates, modify existing templates or create new orders templates; and use an online help feature.

Before submitting an orders request, the user must submit a requirement in the requirement tracking module and must source the requirement using the sourcing module. All mobilization orders must have a record in the SM for the associated SSN based on the Requirement Tracking Number (RTN) of the requirement being filled prior to the order request creation. The user can only add order requests for members who currently exist in the NPDB.

d. Augmentation Management Module (AMM)

The AMM provides a web based solution for the processing of service member augmentation management during mobilization events. It provides an interface within the existing NCMPS application, and has a central repository of augmentation data, which affords the ability to trace all individuals in the mobilization process. This critical integration makes vital service member, requirement, and order information visible to gaining commands, NMPS and NRA.

An AMM record is created automatically for a member by either the SM or PM when a requirement is filled with a service member. The system allows the Ultimate duty station (ULDUSTA) to modify member's records once the sourcing period begins. Members may be selected for early detachment, an extension, or transfer through the AMM. An order request is created for the Service member by the AMM once the Member's record completes the approval process. Once the request is created, orders can be generated from within the OWM. When generated, the system updates the requirement data in the SM as well as the service member data in the PM.

e. Requirement Tracking Module (RTM)

The Requirement Tracking Module (RTM) provides a web based solution for individual commands to request manpower and/or individual personnel needs. The RTM allows commands to enter manpower requests and provides the ability to track the processing of a request throughout its lifetime. This works for both active duty and reservists. The RTM provides approved billet requirement information directly into the SM allowing for the direct assignment of augmentation manpower to fill the identified requirement need. Once a Service member is assigned to an approved requirement and selected for mobilization, an order request is created and orders are issued. The tracking lifetime of an active duty requirement is from inception to designation as being related to active duty and assignment of active duty personnel; and for a reservist, from inception to creation of orders. The RTM has a built in functionality that provides the capability to task an organization to source a Service member to a specific requirement. It also provides a mechanism for the tasked command to provide the SSN of the Service member that is designated to fill the requirement. Note that the RTM is not deployed on BOL. While it is an integrated component of NCM MPS, due to the sensitivity of data being entered and tracked in the RTM, it is installed and operated on the Secret Internet Protocol Routing Network (SIPRNET). Login to the RTM is via the Navy Manpower Online (NMPOL) system which is accessed on the SIPRNET.

The following are brief descriptions of the interfaces that the RTM has with the other modules within NCM MPS, as well as other manpower systems:

(1) Sourcing Module: The SM provides the interface for sourcing manpower to specific requirements. Specific unclassified data is transferred from the RTM to the SM through a certified SIPRNET to Non-Secure Internet Protocol Routing Network (NIPRNET) transfer method. This data transfer will provide the SM with the data required to fill the requirement and trigger order requests for the Service members fulfilling the manpower need.

(2) Order Writing Module: The RTM is directly impacted by the OWM. Once orders have been generated for a Service member filling an identified

requirement, a certified NIPRNET to SIPRNET transfer provides the sourcing information for the requirement along with an electronic copy of the Service member's orders for fulfilling that particular requirement.

(3) Augmentation Management Module: The AMM is designed to provide an automated approach to augmentation management and a centralized management tool for the process. The AMM provides the ability to trace all individuals. This critical integration within NMCMPs makes vital Member, requirement, and order information visible to gaining commands, NMPS and NRA.

(4) Processing Module: The PM is used to capture, store, and retrieve information on each mobilized reservist and retired Service member from the time the Service member reports for duty through the time the Member has completed processing at the NMPS and is transferred to a gaining command. The NMCMPs is also used to capture, store and retrieve information during demobilization.

(5) Total Force Manpower Management System (TFMMS): Billet data from the TFMMS is required by operators/users using RTM. The RTM obtains data from the TFMMS database directly through the use of a custom interface that is linked to approved stored procedures. All data interfaced between the TFMMS database and the RTM is read-only.

F. CHAPTER SUMMARY

APPLY, CMS-ID, and NMCMPs all have similar functionality from the management, assignment, and placement of service members. NMCMPs and CMS-ID interact with both active component and reserve component databases, with NMCMPs providing functionality similar to detailing. Although each process has its own reason for existence, one could see a potential for redundancy in how they accomplish their functions. A functional requirements comparison of APPLY, CMS-ID, and NMCMPs will be presented in the next chapter.

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III. SYSTEM REQUIREMENTS SIMILARITIES. CAN CMS-ID AND NCMPS MEET THE REQUIREMENTS OF APPLY?

A. INTRODUCTION

A requirements document is a formal document that communicates the requirements of a proposed system to key stakeholders and serves as a contract for the systems project [7]. In Chapter III, we discuss the requirements of APPLY/ JOAPPLY and compare these requirements with the requirements of Career Management System-Interactive Detailing (CMS-ID) and Navy-Marine Corps Mobilization Processing System (NMCMPs). With an APPLY/JOAPPLY centric view, we will focus on similarities and parallels in functionalities, as well as compare the roles of system users. Each system has multiple user types defined by their role in the system.

B. USER ROLES

1. JOAPPLY

The Reserve Junior Officer Interactive Detailing (RJOID) Requirements Document lists the following as users of the system: Reserve Component (RC) Junior Officer, RC Detailer, RC Program Manager, and RJOID Manager. But in practice, though the functionality of the users is similar, the role names are different. For instance, the Operational Support Officers (OSO) have similar functionality as the Program Manager, and the role of the Detailer is completed by the Assignment Coordinator. One explanation for different terminology is the paygrade of those functioning in the role. Reservists do not use the term Detailer, for it implies mentorship and career guidance. Having an Assignment Coordinator (E-5 or E-9) provide career guidance to a junior officer does not fall in line with the U.S. Navy's vertical hierarchical organizational structure.

2. APPLY

User roles in APPLY are not formally identified, but they are the Senior Reserve Officer, Operational Support Officer (OSO), APPLY Selection Board members, and CNRFC N12 staff.

3. Career Management System- Interactive Detailing (CMS-ID)

The roles listed in CMS-ID are the Sailor, Detailer, Command Representative, Command Career Counselor, and Command Policy Administrator. This system was designed primarily for the career management of enlisted sailors, thus the naming convention is not an issue.

4. Navy Marine Corps Mobilization Processing System (NMCMPs)

NMCMPs roles are described by the processing level of use as opposed to using the role titles. The users are all administrative types within the processing levels. They include Level One (Command), Level Two (Manpower Claimant), and Level Three (Headquarters) [8]. There is also a Member Access role that has very limited functionality. One user may have multiple roles.

C. FUNCTIONAL REQUIREMENTS

1. Search for Billets

The ability to search for available billets is the center of any assignment placement system. Users, depending on their assigned role, will be able to search for billets with ease, based on the criteria.

a. JOAPPLY

Before reserve officers are assigned to billets, they are allowed to search for billets. JOAPPLY permits junior reserve officers to search for available reserve billets from a database of available billets accessed via the APPLY website. Billets can be

searched by a variety of criteria including 1) Community - Unrestricted Line, Restricted Line, Staff Corps, 2) Designator, and 3) Paygrade. See Appendix C for a complete list of search criteria. Other search functions available are reset search criteria, view search results with detailed information about the billet, and compare up to five billets concurrently. The different role designees have specific search functionality based on their role requirements.

Following the display of requested billets, the system uses the Reserve Functional Area and Sex (RFAS) codes to narrow the match of acceptable billets. The RFAS codes are designed to assist in matching the right reserve officer to a particular billet. The RFAS codes are not all defining, but they do provide criteria that limit the number of applicants to a finite group, such as rank and gender requirements, as well as acceptable substitutions for the desired rank [Ref.3]. Additional comments provided by the Operational Support Officer (OSO) complements the RFAS in presenting specific requirements for billets.

b. APPLY

APPLY functions allow senior officers the ability to search for billets similar to JOAPPLY. But there are subtle differences. First, the process is completed once a year prior to the APPLY Board, and second, up to 35 billets can be placed on the wish list vice the three application limit in JOAPPLY. RFAS performs the same function in APPLY as in JOAPPLY.

c. CMS-ID

The CMS-ID requirements document uses the term “requisition” to discuss billets. The system allows searches to be conducted based on the functionality assigned to each user role. Examples of search criteria include Job level, Platform type, Sea or Shore, and Job Match preferences to name a few. Search results are provided in a table format that provides specific information based on user role.

d. NCMCPS

NCMCPS does not provide a billet search function in the same context as JOAPPLY and APPLY. What NCMCPS provides is a means to search for a “requirement.” In NCMCPS terms, a requirement is a set of criteria established for the desired person needed to fill a job. This requirement is created in the Requirement Tracking Module, and is used to create an adhoc billet for mobilization. Requests are then made for individuals based on several factors to include rating/designator, Navy Enlisted Code (NEC) / Navy Officer Billet Code (NOBC), and/or paygrade. A search can be conducted on Requests or for individual Requirements.

2. Qualification Matches

Qualification matching is the process of matching billet requirements to a Sailor’s or Officer’s personnel record.

a. JOAPPLY

JOAPPLY performs the qualification match by comparing a junior officer’s professional and personal profile with billet requirements. System results provide a match status in each of the following qualification areas: Preferences, Assignment Location, Skills, High Priority match, RFAS match, and NOBC match [9]. Results are available for view by the service member, OSOs, and Assignment Coordinators.

b. APPLY

Billet matches are conducted manually by the members of the APPLY Board. As described in Chapter II, board members, through the Slating process, are charged with finding the best fit of officer to billet. Eligible officers submit their wish list with as many as 35 billet requests.

c. CMS-ID

CMS-ID's qualification process is similar to JOAPPLY. The system provides scores in three groups: preference score, moving costs, and skills. The Preference score is based on the ranking of the Sailor's preferences and the billet details. The Moving Costs score is based on Permanent Change of Station (PCS) costs. And the Skills score is determined by a comparison of the Sailor's skills to billet requirements.

d. NCMCPS

The closest match to qualification matches in NCMCPS occurs in the Sourcing Module (SM). In the SM, the match is more of a sort and filter function. Once a requirement is designated to be sourced, a search query is conducted looking for service members that meet the requirements of the search. Once the results are displayed, the fit from the search results is matched to the requirement.

3. View Single Billet Information

Users need the ability to view information associated with individual billets to conduct research, to update information, to provide comments for other users, etc.

a. JOAPPLY

Billet information is accessible through the Job Title in any list of billets. Appendix D contains a complete list of required information for each billet, as well user role functionality differences. One item to note, while viewing the single billet, the junior officer has the ability to view and apply for a billet. Additionally, the OSO and/or the Assignment Coordinators have the ability to add comments to billets.

b. APPLY

APPLY offers eligible officers the opportunity to view billets and apply accordingly. OSOs have the ability to add comments to billets.

c. CMS-ID

Each user has the ability to view single requisitions (billets) as described by their user roles. For instance, the Sailor can view the job description and his/her qualification matches for that billet.

d. NMCMPs

Within the SM, requirements can be browsed and reviewed. Once on the browsing screen, requirements can be found by several search criteria to include, but not limited to, start date and/or end date, NEC/NOBC, and Rating/Designator. Once the search results appear, specific requirement information is available by clicking on the Requirement Tracking Number (RTN) hyperlink.

4. Application Submission and Review

An online application process places the search for billets in the hands of the service member vice the Detailers and the Command Career Counselors. This process removes a layer of work and also decreases actual contact time, thus relieving some of the call volume received by the Detailers.

a. JOAPPLY

When a junior officer submits an application for a billet in JOAPPLY, the officer can make comments on the application, update personal and professional profiles, have three applications on file at one time, and have the ability to check the status of current applications. If the junior officer already has three applications on file, the system presents a list of the current applications on file and the option to cancel any submitted application in order to continue with the current application. Once the application process is complete, an automated confirmation is given to the applicant. When necessary, the OSO or Assignment Coordinators have the ability to submit an application on behalf of a junior officer.

b. APPLY

Business rules for the APPLY process negates the need to submit formal applications. As discussed in Chapter II, eligible officers are slated to billets based on the best match of officer to billet, as determined by the APPLY Board.

c. CMS-ID

Sailors input their future billet preferences with a rank and level of importance into CMS-ID.

d. NCMCPS

The application process is not applicable at the mobilized service member level. Choices are limited to operational needs, and typically assignments are made without service member input.

5. Application Search

a. JOAPPLY

The OSOs and the Assignment Coordinators have the ability to search billet applications. Search limitations are determined by the user roles further described in Appendix E. Search results are displayed in a table with the ability to sort the results.

b. APPLY

There are no applications to search in APPLY. But the functionality of the slating process provides a sorting function based on billets, or by officers. When the search is billet focused, eligible service members are listed as well as the billet ranking on their individual lists. For the officer search, a billet list is produced indicating the requested billets in rank order.

c. CMS-ID

Sailor preferences are within their profile. When a user queries a particular Sailor's record, he/she will be able to view the Sailor's preferences.

d. NCM MPS

This item is the same as described in number four above. However, in the RTM and the SM, functionality exists to search for requirements and requests as necessary.

6. Billet Comparison

After a billet search is completed, the ability to compare selected billets is a useful tool for ease in making a selection.

a. JOAPPLY

All user roles have the ability to view billet comparison information and are able to select billets, compare selected billets, and/or view billet details. When conducting a billet comparison, some of the junior officer's personal information is displayed for ease of comparison, to include: PRD, paygrade, designator, and NOBC. The junior officer will also see unit location, unit name, supported command location, job title, qualification matches for preferences, assignment location, skills, and policy. Here the system provides the junior officer the opportunity to submit an application for a billet. Although they have the capability to compare up to five billets in one viewing, junior officers are limited to only three billet applications per monthly cycle. A list of general billet information is listed in Appendix F.

b. APPLY

This function is similar to JOAPPLY. Senior officers have the same ability to view and apply for billets that closely match their individual qualifications.

c. CMS-ID

Like JOAPPLY, Sailors can select up to five billets for comparison. For comparison assistance, the Sailor's profile summary and billet information is displayed. This function matches well with JOAPPLY, for they both include the service member's qualification match with the billet, skills and certification matches, as well as the ability to apply for the billet or place it on the preference list.

d. NCMCMPS

There is no feature to compare billets in NCMCMPS in the same sense as JOAPPLY. What it does have that is similar is the ability to conduct a requirement search which will list the search results on a grid for review. Within this grid, the results are displayed in columns and rows, with each row containing a requirement. The column headings are the search criteria. Therefore, there is a means of requirements comparison.

7. Service Member Comparison

Having the ability to view multiple applicants and compare their profiles enables the record administrators (Detailers, Assignment Coordinators, OSOs, etc.) to better place the right person in the right job.

a. JOAPPLY

The Assignment Coordinator has the ability to select one or more junior officers, compare their records, view personnel information, view officer history, and send messages to the junior officer. Comparison information includes personal data, PRD, and application preference ranking to name a few. See Appendix G for a full list.

b. APPLY

Member comparisons are conducted during the APPLY Board. See "The APPLY Process" in Chapter II.

c. CMS-ID

Detailers can select up to five Sailors at one time for comparison. Items available for comparison are Required Skills, PRD, Job Codes, and all comments associated with the Sailor to name a few. This information is available to them at all times throughout the billeting cycle.

d. NCMPS

In the Processing Module (PM), there is functionality to view a Service member's record, but only one record can be seen at a time.

8. Program Manager Compares Multiple Applicants

Having the ability for a command to compare multiple applicants gives the command leadership the opportunity to have a role in the selection of a future member of their team.

a. JOAPPLY

The Program Manager can view applications for billets within an assigned Unit Identification Code (UIC) and subordinate commands for comparison. The role of the Program Manager, similar to the role of the Detailer, has the ability to view, rank, and comment on billets. However, there is one difference; the Program Manager cannot see any applicant identifying information (no SSN or name).

b. APPLY

Comparison of applicants occurs during the APPLY board.

c. CMS-ID

Commands can select up to five applicants for comparison. As in JOAPPLY, Commands can compare applicants (no SSN or name), rate applicants, and enter comments about the applicant.

d. NCMCMPS

This is not an applicable function for NCMCMPS in reference to APPLY/JOAPPLY. When members are sourced within NCMCMPS, there is a search conducted based on the established requirement. If the Service member meets paygrade, designator, etc., they are selected for mobilization.

9. Service Member Access to Personnel Information

The service member's ability to access his/her own service record aids in the accuracy of information available to decision makers. It is important for service members to review their record on an annual basis to ensure accuracy such as the inclusion of credit for awards received, service schools attended, and other items considered during the selection process.

a. JOAPPLY

Junior Officers have the ability to review their personnel record to ensure accuracy of the information. The information is separated into the following modules: History, Personal, Professional, and Support. Appendix H provides a detailed list of available information in the Professional and Personal modules. If there are discrepancies, guidance is provided to seek a remedy for items that cannot be changed directly by the service member. The History module provides a historical account of previous military and civilian assignments. The Support module provides the necessary information not captured in the other modules.

b. APPLY

Prior to the APPLY Board, there is a scheduled window of time for service record maintenance by the member prior to the convening of the APPLY Board. During this period, the service member is encouraged to update personal information and verify the accuracy of all information.

c. CMS-ID

CMS-ID provides the Sailor the opportunity to view their service history, personal profile, and professional profile. The data points, for comparison with JOAPPLY, do not quite match, but include similar information. CMS-ID was designed around the enlisted Sailor, whereas JOAPPLY was designed specifically for reserve officers.

d. NCMCPS

Service members have access to their service records via other systems such as JOAPPLY and CMS-ID. NCMCPS provides limited access for service members who log in the Member Access role.

10. Search for Service Members

Searching for service members is a basic functionality needed for ease of movement throughout each system.

a. JOAPPLY

Administrative users have the ability to initiate searches for junior officers. Searches can be conducted by name, partial last name, and SSN for individual searches; and designator, paygrade, and PRD to name a few for multiple officer searches. The functionality also exists to search for just applicants. Program Managers can only search for officers on in their command's UIC or subordinate UIC(s).

b. APPLY

The ability to search for members by SSN and last name is available, as well as by unit assignments.

c. CMS-ID

Functionality exists to initiate searches as determined by the user's assigned role. Common search criteria are gender, paygrade, PRD, UIC, and job code/type [10].

d. NCM MPS

NCM MPS enables the user, via its interface with NPDB, to search for service members to fill a requirement. In the PM, searches are conducted for mobilized or demobilized Service members. The following is a partial list search criteria used: SSN, UIC, RTN, Reported date. The other modules use similar search criteria for searches within the particular module.

11. Alerts and Notifications

Alerts and Notifications are communication tools used to keep all system users informed.

a. JOAPPLY

Notifications provide the junior officers with information about actionable items. For instance, when the junior officer's PRD is approaching, a message is sent to inform him that he has entered the PRD window and he can begin considering his next assignment. Notifications are also sent to the junior officer with notice of assignment selection status. After a billet is assigned, automatic notifications are sent to the junior officers notifying them that an application for that billet is no longer valid.

Alerts are similar to notifications. Alerts provide information to the junior officer relative to his service record. For example, alerts can be sent to inform the junior officer to update his security clearance, contact information, or review duty preference. These alerts are time triggered.

b. APPLY

Alerts and notifications do not exist with APPLY. The officer can review the APPLY site to retrieve a status at any time. When the results are received from the APPLY Board, email notification is sent to members.

c. CMS-ID

In CMS-ID alerts and notifications focus around timing and job preferences. Alerts are color coded, same as qualification matches, for all available billet alerts. Alerts are presented for the Navy First Five Jobs, the Top Five Jobs Navy Wide that matches the Sailor's profile, First Five jobs matching the Sailor's actual preferences, Incentivized Jobs, and current job applications.

Notifications inform the sailor when time requirements in the PRD window approaches and the status of billet selection. Other system users have role appropriate alerts and notifications as listed in the requirements document.

d. NCMCPS

The PM has a notification system used to provide each Service member with series of questions and instructions that need attention prior to mobilization.

12. Homepages

The Homepage is initially seen after the user logs into the system. Each user has role based functionality as determined by role rights.

a. JOAPPLY

As the junior officer accesses the system, notification and alerts are presented. The notification and alerts remain available to the junior officer until acknowledged. Once acknowledged they reside in the junior officer's alert history. Detailer and Program Manager have home pages which contains specific information for

conducting their job. One alert worth noting is the Navy Top Five Jobs. JOAPPLY is designed to display five vacancies that are local to the junior officer and has a designator match.

b. APPLY

Figure 16 illustrates the information presented to senior officers via their homepage.

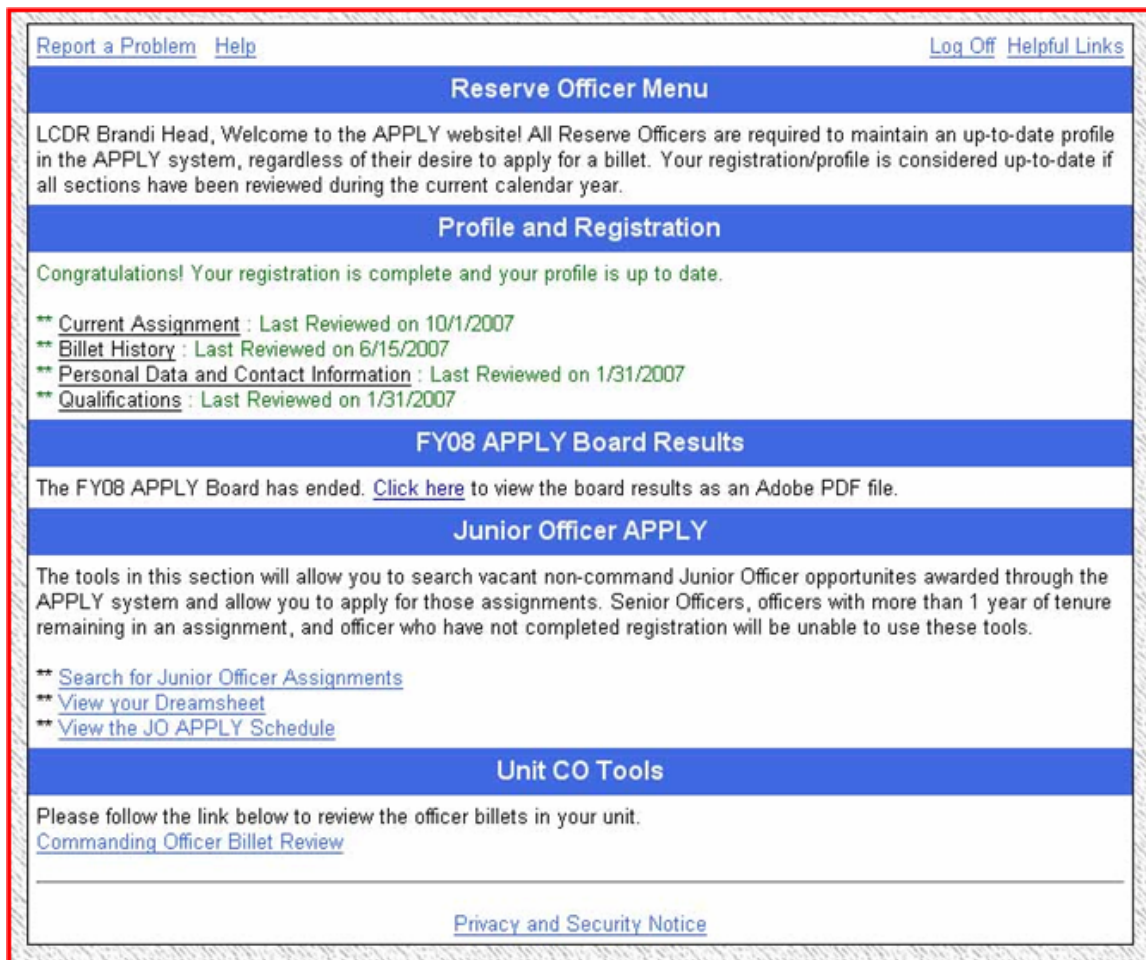


Figure 16. APPLY/JOAPPLY Homepage

c. CMS-ID

There is no specific mention of Homepages in the CMS requirements documents, but the functionality listed above in the JOAPPLY homepage section is also available in CMS-ID.

d. NMCMPs

Initial access to NMCMPs is via Bupers Online (BOL). Once the NMCMPs link is clicked, the homepage is displayed. Messages posted on the homepage are available to all users. Functionality is available based on user role. A View My Orders button is available on the homepage for the individual logged in. For instance, if a Service member logs on in Member Access only, the site map is not available.

13. Application Eligibility Filters

Filters aid in the application process by providing an automated “first cut” to determine applicant eligibility.

a. JOAPPLY

When an application is submitted, the eligibility filters analyze the applicant’s service record and compares the record to billet requirements. If an application does not meet certain eligibility requirements, an alert is posted. Applications are qualified or disqualified prior to an application acceptance or rejection. The system will only accept for submission records that meet all eligibility requirements.

b. APPLY

Applications are not submitted in APPLY.

c. CMS-ID

Filtering takes place as Sailors submit their top preferences into the system. Then a qualification match is executed for preference, costs and skill by

comparing the Sailor's service record to billet requirements. Results are color coded green, yellow and red. This information allows all users the ability to find the best Sailor fit to a billet.

d. NCMCPS

When sourcing a Service member in the SM, tools are in place to prevent erroneous entries of RTN, to prevent entering overlapping mobilization dates, and to prevent concurrently assigning someone multiple requirements during the same time period. Also, an error message will be displayed if there is an attempt to source the wrong paygrade to an assignment.

14. Reports and Administrative Requirements

The ability to generate reports provides a means to archive output.

a. JOAPPLY

Administrative role users have the ability to save, recall, and print reports, as well as create report templates. Examples of reports used in JOAPPLY are number of Billets available, number of applications in queue, and selection results to name a few.

b. APPLY

Reports are available in the same manner as indicated in JOAPPLY.

c. CMS-ID

There is no specific mention of reports in the requirements document, but the functionality is described in the requirements document for generating and relaying similar information as that described in JOAPPLY.

d. NCMCPS

There are standard reports, as well as custom reports called "Ad-Hoc" reports. Each module creates reports relative to the information within the module.

Examples of standard reports in the PM are Alpha lists (member roster), Due-IN (list of members due in to the Navy Reserve Activity), and No-Shows. The SM produces reports with sourcing and requirements information, the AMM generates reports concerning the movement of mobilized service members. Creating ad hoc reports allows users to customize a report not in the list of standard reports.

D. CHAPTER SUMMARY

This chapter illustrated how the various functions support the request for a billet, ultimately leading to a billet assignment. Even though each system accomplishes the task differently, the end results are the same, making the best fit between a service member and a billet. Additional functions exist that allow automation to assist in the screening and other support processes.

IV. FUNCTIONAL AND FINANCIAL ANALYSIS

A. INTRODUCTION

Chapter IV provides an analysis of the functional requirements discussed in Chapter III by interpreting which system, if any, provides a match to the functionalities of the APPLY/JOAPPLY system. Also discussed in this chapter are the estimated costs of execution of the APPLY Board, the estimated manpower costs of manning both the APPLY and Career Management System-Interactive Detailing (CMS-ID) shops, and the website activity capacity limits. The analyses of the above factors are the basis for the recommendations discussed in Chapter V.

B. FUNCTIONAL ANALYSIS

1. Functional Requirements

	APPLY/JOAPPLY	CMS-ID	NMCMPS
		(Y/N)	(Y/N)
1	Search for Billets	Y	N
2	Qualification Matches	Y	N
3	View Single Billet Information	Y	Y
4	Application Submission and Review	Y	N
5	Application Search	Y	N
6	Billet Comparison	Y	N
7	Service Member Comparison	Y	Y
8	Program Manager Compare Multiple Applicants	Y	N
9	Service Member Access Personnel Information	Y	Y
10	Search for Service Members	Y	Y
11	Alerts and Notifications	Y	Y
12	Homepage	Y	Y
13	Application Eligibility Filters	Y	Y
14	Reports and Administrative Requirements	Y	Y

Table 1. Functional Requirements Comparison

As a reminder, the functional requirements used as the basis of comparison originated from the Reserve Junior Officer Interactive Detailing (RJOID) Functional Requirements document. This is the document that was used for the design the JOAPPLY system. This is not a complete match to the requirements in the RJOID, for we combined several of the latter functions in the document due to their similarities. For APPLY, there is no functional requirements document (M. Whitfield, personal communication, January 9, 2008).

Users of APPLY and JOAPPLY use the same website to interface the system. Table 1 above is the compilation of the functional requirements discussed in Chapter III, along with a Yes or No answer to how CMS-ID and Navy Marine Corps Mobilization Processing System (NMCMPs) match these functional requirements.

The table shows that CMS-ID has processes in place that meet the functional needs of the JOAPPLY functional requirements listed; whereas NMCMPs meets less than 60% of the same requirements. Meeting the requirements does not mean that the processes complete tasks in the same manner as described in the RJOID. Nonetheless, such functions can be accomplished within the constraints of the respective systems. The CMS-ID JMCS Spiral 2 Functional Requirements document and the NMCMPs's user manuals were used to determine requirements compatibilities.

2. Comparative Points of Interest

Table 2 lists some significant features that are not functional system requirements but do affect the system, to include: user accessibility, enterprise compliance, and production of orders. User access will become a more vital issue with the expected implementation of increased access restrictions by the Navy. To better illustrate this issue, the table shows that CMS-ID can both be accessed via Navy Knowledge Online (NKO) and is Public Key Infrastructure (PKI) / Common Access Card (CAC) compliant; whereas APPLY/JOAPPLY and NMCMPs are not. PKI/CAC compliance provides the Information Assurance (availability, integrity, authentication, confidentiality, and non-

repudiation), required by DoD. This adds an extra layer of security for the protection of personal information. Further access to NKO gives the user another means of accessing their personnel records.

Comparison Points				
	<u>APPLY</u>	<u>JO APPLY</u>	<u>CMS-ID</u>	<u>NMCMPS</u>
Access via Website	Y	Y	Y	Y
Access via NKO	N	N	Y	N
PKI/CAC Compliant	N	N	Y	Y
Registration	Y	Y	Unknown	Unknown
Able to update personal information	Y	Y	Y	Y
Able to update professional information	Y	Y	N/A	N/A
Require Standalone DB	Y	Y	Y	Y
Use order writer application to general orders	Y	Y	Y	Y

Table 2. Non Functional Attributes

C. FINANCIAL ANALYSIS

1. Manpower

COMNAVRESFORCOM (CNRFC) N122 provides the operational support for both APPLY/JOAPPLY and Reserve CMS-ID. Although both systems' operations fall under CNRFC N122, each system has two distinct groups dedicated to their operations. For APPLY/JOAPPLY, the workforce is comprised of one O4, one E8, one E7, two E6s and one E5 (M. Magno, personal communication, February 19, 2008).

The CMS-ID workforce is broken down to two E9, one E8, two E7, eight E6, and two civilians. Also the CMS-ID staff includes four non-CNRFC personnel (M. Landry, personal communication, February 22, 2008).

Table 3 provides an estimated cost of manpower for the operation of both systems.

The following assumptions were used in the design of Table 3: a) Members, indicates the number of individuals and their respective paygrade, b) Daily Pay, provides the daily pay of each individual, and c) Work Days, calculates based on 50 work weeks per year, a five day work-week, and 250 actual work days per year. Because the entire

work time is not devoted to the task of APPLY/JOAPPLY and CMS-ID management, the assumption is that 80% of the time is productive work time. The remaining 20% of the time is devoted to administrative, training, and other individual requirements. Yearly Pay is the product of the Members, Daily Pay, and Work Days. Appendix M provides support information for these assumptions.

APPLY and CMS Work Force				
	Members	Daily Pay	Work Days (Yearly)	Yearly Pay
Apply				
LCDR (O4)	1	\$ 186.76	250	\$ 46,690.00
SCPO (E8)	1	\$ 123.83	250	\$ 30,958.33
CPO (E7)	2	\$ 108.34	250	\$ 54,170.00
PO1 (E6)	1	\$ 91.47	250	\$ 22,867.50
PO2 (E5)	1	\$ 77.46	250	\$ 19,365.00
Total				\$174,050.83
CMS				
MCPO (E9)	2	\$ 153.23	250	\$ 38,308.33
SCPO (E8)	1	\$ 123.83	250	\$ 30,958.33
CPO (E7)	2	\$ 108.34	250	\$ 54,170.00
PO1 (E6)	8	\$ 91.47	250	\$182,940.00
CIV	2	\$ 204.58	250	\$102,287.50
Total				\$446,972.50
- For the Reserve, CMS and APPLY operator work force is co-located				

Table 3. APPLY/JOAPPLY and Reserve CMS-ID Workforce Cost Estimates

2. APPLY Board Membership and Costs

The APPLY Board consists of active and reserve officers of various designators in the paygrade of O5 and above. Officers from various designators participate as members on the APPLY Board. The APPLY Board is subdivided into panels of specific designators. This is done because Line Officers do not compete with JAG Corps Officers

for the same jobs, etc. Table 4 illustrates the breakdown of the board members by panel itemized by paygrade. Each panel is headed by at least one flag officer who acts as panel president. For example the Navy Emergency Preparedness Liaison Officer (NEPLO) panel consisted of one Rear Admiral and eight Captains in the last APPLY board.

APPLY Board Membership												
	NEPLO	INTEL	METOC	CHAPLAIN	NAVAIR	O4/O6 Line	O5 Line	HR	JAG	Supply	Medical	Total
Days	5	5	3	2	5	12	12	5	2	5	5	
Membership												
RADM (O8)	1	1	0	0	0	0	0	0	2	0	4	8
RDML (O7)	0	1	1	2	1	4	2	2	0	2	1	16
CAPT (O6)	8	9	0	5	7	21	18	4	7	7	14	100
CDR (O5)	0	0	2	0	1	2	9	3	0	0	1	18
Total Member	9	11	3	7	9	27	29	9	9	9	20	142

Table 4. APPLY Board Membership, 2007

Table 5 represents the estimated cost for the APPLY Board members. The cost items provided in the table are only a subset of the overall cost associated with execution of the APPLY Board. Similar to the APPLY Board membership table, this table provides the cost for a particular panel, as well as the cost of the officers by paygrade. The total costs are a summation of the member's basic pay, per diem for the Millington, TN where the board convenes, and the estimated airline costs from various cities across the United States. See Appendices K and L for more information. From the information presented, the cost of APPLY Board members totaled over \$466K. APPLY board costs are independent of system costs. The relevance of this information may not be initially apparent, but it provides insight into the cost of board operations and serves as a lead in to future research opportunities.

APPLY Board Costs												
Board Types	NEPLO	INTEL	METOC	CHAPLAIN	NAVAIR	O4/O6 Line	O5 Line	HR	JAG	Supply	Medical	Total
Basic Pay Cost	\$12,836.85	\$15,906.20	\$2,378.88	\$4,091.50	\$12,378.85	\$90,511.56	\$91,480.56	\$12,253.60	\$5,361.42	\$12,955.45	\$29,642.50	\$289,797.37
Per Diem Cost	\$5,940.00	\$7,260.00	\$1,188.00	\$1,848.00	\$5,940.00	\$42,768.00	\$45,936.00	\$5,940.00	\$2,376.00	\$5,940.00	\$13,200.00	\$138,336.00
Travel Cost	\$2,439.00	\$2,981.00	\$813.00	\$1,897.00	\$2,439.00	\$7,317.00	\$7,859.00	\$2,439.00	\$2,439.00	\$2,439.00	\$5,420.00	\$38,482.00
Total	\$21,215.85	\$26,147.20	\$4,379.88	\$7,836.50	\$20,757.85	\$140,596.56	\$145,275.56	\$20,632.60	\$10,176.42	\$21,334.45	\$48,262.50	\$466,615.37
Assumptions:												
- Per Diem =					\$132.00							
- Round trip Air Fare from New Orleans to Memphis					\$300.00							
- For the Apply Panel, travel cost is an average of the cost of flights from major cities with a Memphis destination					\$271.00							
- Members only sat on one board												

Table 5. APPLY Board Cost

The following is an explanation of the elements in Table 5:

a. Basic Pay Cost is the sum-product of the number of members at a particular paygrade, basic pay for that paygrade, and the number of days the panel deliberates. For the past NEPLO panel, there was one Rear Admiral and six Captains, and the panel deliberated for five days. The NEPLO basic pay costs are calculated as follows:

$$\sum (\text{Daily pay}_{\text{specified paygrade}}) \times (\text{Number of Member}_{\text{specified paygrade}}) \times (\text{Days of Deliberation})$$

$$(\$386.01) \times (1) \times (5) + (\$272.67) \times (8) \times (5) = \$12,836.85$$

b. The Per Diem Cost is calculated by multiplying the per diem rate by the number of members, assigned to a particular panel. For the NEPLO panel there were nine members. The per diem rate of \$132 was acquired from the per diem rate table for Millington, TN (See Appendix L).

$$(\text{Number of members}) \times (\text{per diem rate})$$

$$(9) \times (\$132) = \$5940.00$$

c. Similar to the Per Diem Cost, the Travel Cost is the product of the number of members assigned to a particular panel and the average air fare. The air fare is retrieved from the online travel website, Expedia. Since the APPLY Board is comprised of both active and reserve members, this suggests that the members could travel from various locations across the United States. Fifteen popular cities were used for flight information (See Appendix K). An average air fare of \$271 was calculated from these cities to Millington.

(Number of members) X (average air fare rate)

(9) X (\$271) = \$2439.00

d. The Total is the aggregate of all the individual costs. For NEPLO, the total cost equaled \$21,215.85. Additionally, this table provides an itemized view of the costs by type (i.e. Travel Costs for the board equal \$38,482).

3. APPLY Board Supporting Cast

There are other functions that support the success of the APPLY board. These include the administrative support provided by the Board Recorders and Screen Operators. Board Recorders scrub all records eligible for the board for completeness, while the Screen Operators operate computer terminals that allow the retrieval and presentation officer and billet information.

Table 6 displays an estimated cost of service attributed to the supporting cast described above. It shows the number of members assigned per paygrade, that daily pay of that specific paygrade, and the number of days that the individual was employed in support of the APPLY Board. From this information the Basic Pay Cost was calculated.

APPLY Board Support Cost				
	Members	Daily Pay	Days	Basic Pay
Recorder/Screen Operator				
- CDR	3	\$225.88	48	\$10,842.24
- LCDR	22	\$186.76	325	\$60,697.00
- LT	11	\$134.28	210	\$28,198.80
- LTJG	5	\$107.99	74	\$7,991.26
- ENS	1	\$82.31	12	\$987.72
- CPO	2	\$108.34	52	\$5,633.68
- PO1	3	\$91.47	86	\$7,866.42
- PO2	1	\$77.46	26	\$2,013.96
- PO3	1	\$65.95	13	\$857.35
- Civilian				
Total	49			\$125,088.43

Table 6. APPLY Board Support Cost

a) Members represent the number of members at a given paygrade who actively assist with the APPLY Board. In this support role, members often provide support to more than one panel. For example, there were three commanders (CDRs), who served as recorders; the commanders' aggregate total number of days equated to 48 days. This does not mean that each commander contributed 48 days nor does it mean that each commander contributed sixteen days (16 X 3). This number represents 48 commanders days of support is provided. For the 2007 board, commander one contributed 18 days, commander two contributed 20 days, and commander three contributed 10 days (K. Bailey, personal communication, March 6, 2008).

b) Daily Pay is calculated as specified in Appendix M, which was based on the 2007 pay chart. For example, a Lieutenant Commander's (LCDR) daily pay is \$186.76.

c) Days is the sum-product of the number of Members at a given paygrade and the number of Days that each individual at that paygrade supported the APPLY Board. For example eleven Lieutenants (LT) provided support to the APPLY board as follows: five LTs contributed 26 days, one LT contributed 20 days, and five LTs contributed 12 days (K. Bailey, personal communication, March 6, 2008).

$$\Sigma(\text{Number of LT}) \times (\text{Number of days})$$

$$(5 \times 26) + (1 \times 20) + (5 \times 12) = \underline{210}$$

d) Base Pay is simply the product of the number of officers at the specific paygrade and the number of participation days.

4. Other Related Costs

Both CMS-ID and APPLY are funded from various entities within DoD. In Fiscal Year (FY) 2007, CMS-ID received Research, Development, Test & Evaluation (RDT&E) and Operation and Management Navy (O&MN) funding of \$767K and \$741K, respectively.

The O&MN funding comes from Office of the Chief of Naval Operations (OPNAV). The RDT&E funding has been site directed from Congress. For FY 08, CMS-ID's proposed budget is projected at \$1.4M for RDT&E and \$1.08M for O&MN (D. Petty, personal communication, February 25, 2008).

In regards to APPLY, PERS N1 provided \$175K in funding to support the APPLY Contract. Additionally, two GS-13 level individuals provide technical support equivalent to eight hours per week for APPLY (M. Whitfield, personal communication, January 9, 2008).

5. Website Usage

Websites have proven invaluable to industries, as well as to the military. Table 7 illustrates the number of user log-ins of both websites for each given month. This information is not representative of every user that visits each site, but shows the number of individuals who have logged-in over the specified time frame. For APPLY, the information covers January 2007 to January 2008 (Figure 17); CMS-ID's data is for the period of February 2006 to September 2007 (Figure 18). The table also identifies the type of user who accessed the website. For CMS-ID, it indicates the avenue to which the user accessed the system website (i.e. via NKO). A monthly total is provided per system, complemented with a consolidated total.

Figures 17 and 18 provide a graphical representation of the information contained in the Table 7. The CMS-ID website is a robust system that has been tested up to 1000

concurrent users (K. Bailey, personal communication, January 25, 2008). To allow a means of comparison, Figure 19 was created to show the aggregate activity of both systems scaled down to hours, based on an eight hour work and a five day work week. The figure illustrates that at its peak, there are less than a combined average of 200 log-ins per hour. During the heavy usage periods, CMS-ID is handling approximately 280 concurrent users (K. Bailey, personal communication, January 25, 2008). The number of concurrent users is the number of active transactions in the system at the same second. These numbers indicate that the system can handle a heavy load of log-ins.

Website Usage												
Dates	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07
Apply												
- Junior Officers												757
- OSO												24
- Total APPLY	-	-	-	-	-	-	-	-	-	-	-	781
CMS-ID												
- Sailor Login (URL)	140,126	163,610	162,124	129,746	137,304	117,632	149,779	107,383	67,660	53,433	55,978	66,546
- Sailor Login (NKO)	91,355	87,253	126,426	102,946	118,865	102,088	112,538	84,625	36,851	41,919	46,704	56,973
- Total Sailor Login	231,481	250,863	288,550	232,692	256,169	219,720	262,317	192,008	104,511	95,352	102,682	123,519
- CCC/Detailer Login (URL)	6,301	5,241	6,820	5,652	5,815	5,223	6,174	5,110	8,214	6,842	6,732	6,914
- CCC/Detailer Login (NKO)	1,153	1,865	1,475	1,279	1,550	1,400	1,474	1,326	2,138	1,501	1,568	2,131
- Total CCC/Detailer Login	7,454	7,106	8,295	6,931	7,365	6,623	7,648	6,436	10,352	8,343	8,300	9,045
- Total CMS-ID	238,935	257,969	296,845	239,623	263,534	226,343	269,965	198,444	114,863	103,695	110,982	132,564
Dates	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07	Aug-07	Sep-07	Oct-07	Nov-07	Dec-07	Jan-08
Apply												
- Junior Officers	1,528	2,663	3,161	3,818	4,877	5,685	3,333	2,950	1,861	1,664	974	1,077
- OSO	33	44	55	111	109	95	57	76	87	105	84	73
- Total APPLY	1,561	2,707	3,216	3,929	4,986	5,780	3,390	3,026	1,948	1,769	1,058	1,150
CMS-ID												
- Sailor Login (URL)	56,422	62,968	54,547	46,864	51,596	15,929	49,856	31,289				
- Sailor Login (NKO)	55,705	64,417	60,045	50,197	54,147	19,428	60,957	36,075				
- Total Sailor Login	112,127	127,385	114,592	97,061	105,743	35,357	110,813	67,364	-	-	-	-
- CCC/Detailer Login (URL)	6,945	7,663	7,084	6,378	6,913	3,225	14,565	4,698				
- CCC/Detailer Login (NKO)	1,794	1,909	1,736	1,565	1,804	800	2,366	1,212				
- Total CCC/Detailer Login	8,739	9,572	8,820	7,943	8,717	4,025	16,931	5,910	-	-	-	-
- Total CMS-ID	120,866	136,957	123,412	105,004	114,460	39,382	127,744	73,274	-	-	-	-
Combined APPLY and CMS-ID	122,427	139,664	126,628	108,933	119,446	45,162	131,134	76,300	1,948	1,769	1,058	1,150

Table 7. APPLY/JOAPPLY and CMS-ID Website Usage

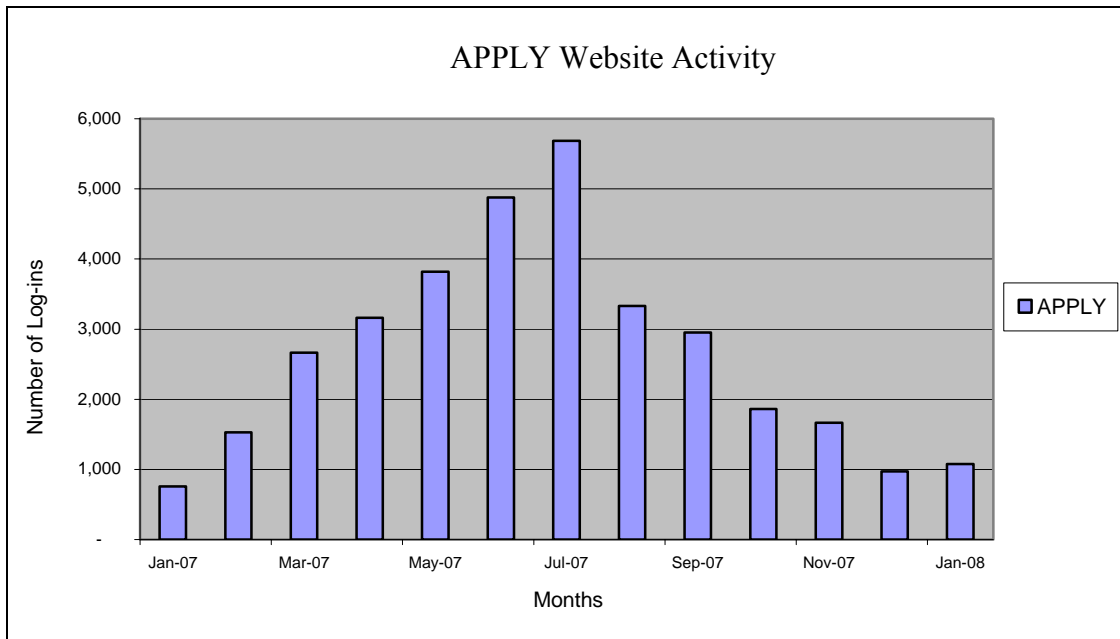


Figure 17. APPLY Website Log-in Activity

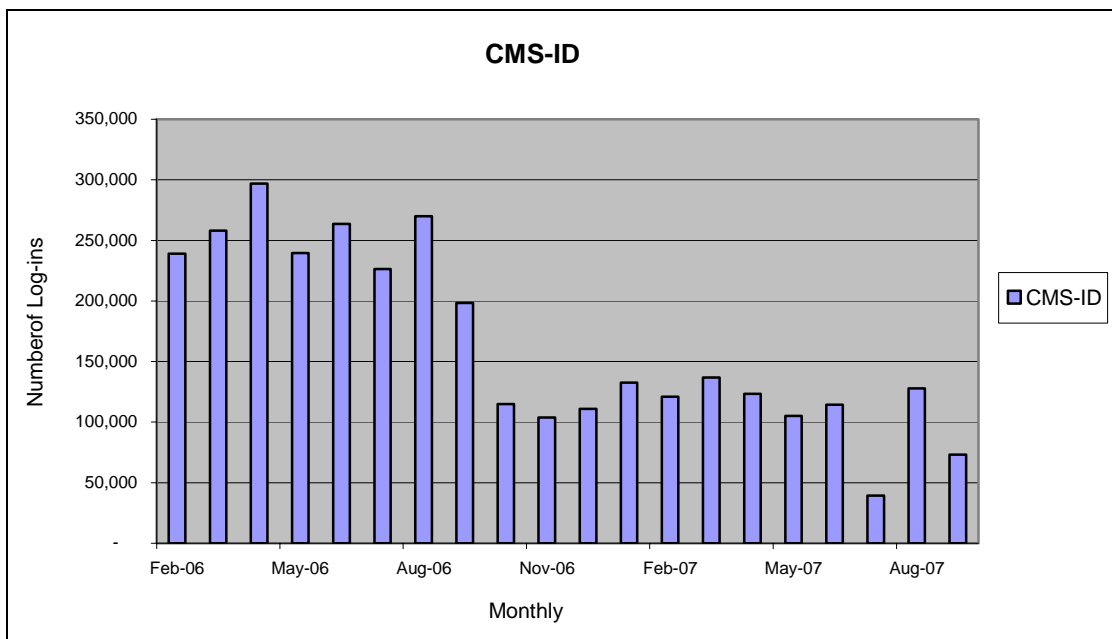


Figure 18. CMS-ID Website Log-in Activity

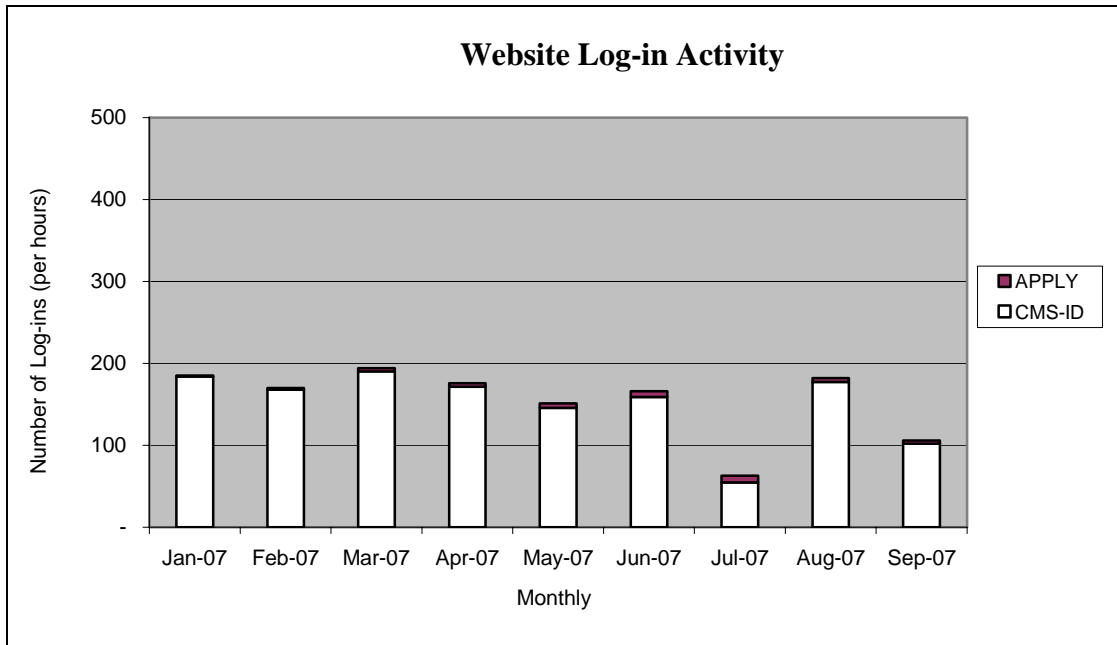


Figure 19. APPLY & CMS-ID Website Log-in Activity

D. CHAPTER SUMMARY

Based on the analysis of the functional requirements, manning, and web activity, CMS-ID appears to be able to absorb the APPLY/JOAPPLY mission. CMS-ID meets and exceeds the functional needs of JOAPPLY when including PKI/CAC and the access versatility of the website address or via NKO. The estimated manpower costs of APPLY \$174K and for CMS-ID, 447K. The estimated cost of APPLY Board is \$718K. CMS-ID has the capacity to absorb the APPLY website activity with no risk of exceeding CMS-ID's max capacity.

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V. RECOMMENDATIONS AND CONCLUSIONS

A. INTRODUCTION

We studied the potential migration of the JOAPPLY/APPLY processes with Career Management System-Interactive Detailing (CMS-ID) or Navy Marine Corps Mobilization Processing System (NMCMPs). Here and after, JOAPPLY/APPLY will be referred to as APPLY. We found many overlaps in functionalities, like uses of legacy data bases, pulling much of the same data for each individual system, and basically conducting the same mission in a different stovepipe. Dennis Wisnosky, Chief Technical Officer of the Department of Defense Business Mission Area, said in an interview July 06, 2007, that "...in areas such as personnel and procurement, a common approach at the Office of the Secretary of Defense should be more efficient and more effective. These functions are great candidates for conversion to services to be shared by all. So a keystone of our strategy is to use Service Orientated Architecture to make our business and Information Technology infrastructure smaller and more agile."

Creating one system that could function in this capacity seemed to be what inspired the creation of CMS-ID. It has the capabilities to access all enlisted personnel data, both active and reserve components, officer data though currently not actively in use, connect to the Electronic Military Personnel Record System (EMPRS) used for selection boards, and the ability to search for personnel, search for billets, and has the means for comparison of both. Applicants have the ability to search for jobs, compare jobs, and apply for jobs. Also the roles of the other users match the functionality of those in JOAPPLY/APPLY.

B. RESEARCH QUESTION

1. Primary Research Question: What is the Best Solution to Effectively Detail Navy Reserve Officers?

As the Department of the Navy strives to increase efficiencies within its management of information technologies, attention is drawn to various IT processes and systems. A system that accomplishes just one task or multiple disparate systems that perform similar tasks provide limited value to the enterprise when the possibility exists to incorporate all into one IT system. This is the case for reserve officer detailing and APPLY.

CMS-ID and NCMPS were introduced as two potential systems that could incorporate the functions of APPLY within their existing architecture. Chapter III compared these two system with APPLY. Even though both illustrated similarities with APPLY, CMS-ID presented a stronger match to APPLY, as shown by tables one and two, in Chapter IV. There is one key difference between CMS-ID and APPLY; CMS-ID's target audience is the enlisted sailor.

CMS-ID has shown its adaptability. Initially, CMS-ID only supported active enlisted, but later its role expanded to include both active and reserve enlisted. Previously, CMS-ID was used to detail officers in the Submarine Community; therefore, this suggests that CMS-ID has a process in place to perform officer detailing, though not currently in use. In keeping with the DoD initiatives to streamline IT systems, it only makes sense to integrate APPLY's functionality into CMS-ID. Even though all three systems are effective in meeting their respective mission requirements, CMS-ID appears to be efficient and robust enough to incorporate APPLY without much change and continue to support its mission.

2. Subsidiary Research Questions

a. Is It Feasible, both Financially and Technically, to Incorporate the APPLY Functions into CMS-ID or Other Related Navy Applications?

CMS-ID and APPLY currently access the same personnel databases. As previously stated, CMS-ID had detailed submarine officers. Although this practice did not continue, the functionality is still in place to support the officer community. This removes the need to restructure CMS-ID. In short, all that is required is reopening the gate to officer data in CMS-ID.

Currently both CMS-ID and APPLY staffs are co-located; this suggests little to no relocation cost associated with the consolidation of both of these staffs. APPLY has two civilian personnel who provide IT support. Although this support only requires 20% of a given work week, shifting from one task to another does introduce inefficiency that could be alleviated through the management of one system. By consolidating these functions with CMS-ID, this IT support could easily be incorporated into the CMS-ID team. Charts from previous chapters show that APPLY's activity is just small percentage of CMS-ID activity. Therefore, the integration of APPLY's functionality into the existing CMS-ID system should have a minimal effect.

b. What are the Costs/Benefits of the Division or Integration of the Reserve Detailing Process?

If there were two processes supported by two independent IT systems, it could be concluded that cost savings should exist if these same two processes were supported by only one IT system. This conclusion could only be reached, if the cost of the consolidation of the two disparate IT systems was less than the cost of the individual IT systems operating independently. The findings from this research suggest that the latter situation exists.

With the two separate IT systems, funding is allocated to support both the manpower and IT technical support as presented in previous chapters. These costs are

not representative of all applicable costs, but provide a basis for comparison. By integrating APPLY into CMS-ID, cost savings should exist. The volume of personnel to be managed would increase, the cost of managing one consolidated CMS-ID system should be less than the aggregate cost of the managing APPLY and CMS-ID separately. Since APPLY's activity is small relative to CMS-ID; plus the robustness, flexibility and adaptability associated with CMS-ID, the technical challenges associated with an integration should be minimal.

This research suggests that the increase to CMS-ID is well within a range that is manageable within its existing infrastructure. Having one system allows a better utilization of resources. Therefore, the costs associated with this integration should decrease; whereas, the overall benefit should remain the same. Instead dividing the funding between two systems, those resources could be pooled together; thereby providing a greater return on investment.

C. CONCLUSIONS

1. The AS-IS process of APPLY works fine. JOAPPLY is a recent addition to reserve junior officer placement, and due to current policy, we believe that in any scenario, the APPLY selection board will continue function AS-IS. Therefore a shift to another system may not be worth the cost and effort.

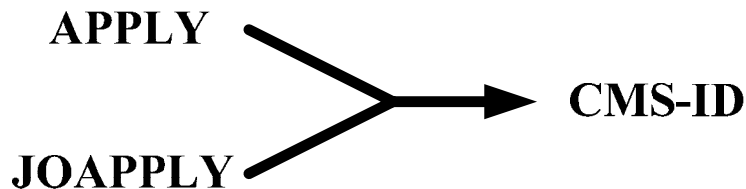
2. CMS-ID is a good match. As described in Chapter III, CMS-ID's system functionality meets or exceeds the functionality of APPLY. Both CMS-ID and APPLY feed off of the same personnel databases, it has more than enough capacity to handle APPLY's user system usage, and is in compliance with PKI/CAC requirements. Also CMS-ID can be accessed via Navy Knowledge Online (NKO), an information portal the gives the user access to multiple types of information in one centralized location.

3. NMCMPs is not a complete match for the needs of APPLY. Though it appears to be a sufficient tool for its mission of managing mobilized troops, it does not fully meet the functional needs of APPLY. These needs include service member access, automated tools to apply for billets, and multiple comparisons at one time to name a few. The possibility certainly exists to upgrade NMCMPs' functionality to include the

addition of other modules to meet the needs of personnel management beyond mobilized forces, but this would not be a timely nor cost effective choice. It appears that to make a change to NCMCPS, the change must work its way through the entire DoD acquisitions process which could take up to two years to get a working product. Therefore, we feel that using NCMCPS would be a long-term project for a short-term fix.

D. RECOMMENDATIONS

1. We believe that an integration of APPLY into CMS-ID is a good long solution for the placement of reserve officers.



The reasons are as follows:

a) CMS-ID and APPLY both have the same mission, but for different groups of service members. CMS-ID serves enlisted service member; APPLY serves reserve officers. Both APPLY and CMS-ID have enough likeness in its functional requirements to lead us to believe that CMS-ID can do the job for reserves officers as well.

b) Currently the manpower for both systems works in the same department, in the same office, though they work exclusively on their own systems.

c) CMS-ID and APPLY retrieve information from the same databases. CMS-ID has the capability to access officer records, though the functionality is currently not in use.

d) CMS-ID has the user capacity to absorb the usage of APPLY. CMS-ID's tested threshold of 1000 concurrent users, at this time, can certainly manage the additional users. Though, this may become an issue when the submission of applications in CMS-ID is moved down a layer to the sailor vice the Command Career Counselor.

e) APPLY's selection board will likely continue as it currently operates. Since CMS-ID currently manages the records for the Chief's boards, certainly the functionality can be used for an officer selection board. One concern is the Slater process. The current Slater process appears to be very efficient, but a manual connect is necessary to interface the APPLY database to the "Tank," whereas CMS-ID data is interfaces via Electronic Military Personnel Records System (EMPRS).

f) CMS-ID and APPLY both utilize Navy Standard Integrated Personnel System (NSIPS) for billet assignments.

g) CMS-ID is the only PKI/CAC compliant system, making it a better steward of personal information.

E. RECOMMENDATIONS FOR FUTURE FOLLOW ON RESEARCH

1. Virtual selection boards. Board members could participate in selection boards from the comfort of their office spaces. It can work much like a video teleconference with the use of a virtual private network (VPN) and video over IP technology. Based on the cost of the two week APPLY board of \$500K, it can be extrapolated that the annual cost of selection boards , based on a 50 week work year, could exceed on \$12 million.

2. Automated application process for active duty officer detailing. Currently, the functionality is available (though not used) to have an online slating process with CMS-ID. It is possible that this system can work for the assignment of active duty officers barring push back from currently established business rules.

3. The potential use of an expert system to assist in the selection of Chief Petty Officers. Due to the sheer volume of eligible records in the Chief's board, the process takes approximately 12 weeks of board time. Using an expert system to pare the records down to more manageable numbers could shorten the board process and save TAD dollars.

4. Conduct a business case analysis to determine the cost impact on a conversion of APPLY to CMS-ID. We recommend that the budget holders of CMS-ID

and APPLY determine, from their perspectives, the potential impact on operations, to include personnel management, system maintenance, and interfaces with legacy data stores. Also include a determination of the payback period for the conversion, as well as a return on investment.

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APPENDIX A: PERSONNEL SYSTEMS AND DATABASES

A. RESERVE HEADQUARTERS SYSTEM (RHS)

The RHS provides management support with emphasis on the quality of readiness information at all command levels, provides a summary of data to upper echelon managers for MOB and strategic decision making. It also serves as the headquarters database for the Navy Reserve.

B. NAVY PERSONNEL DATABASE (NPDB)

The Navy Personnel Database (NPDB) is an integrated database of all Navy Personnel and contains current and historical data on over 1.75 million Navy members and annuitants, including officers, candidates, and enlisted active, inactive, and retired as well as over 21 thousand activities, current and disestablished.

Personnel and UIC hierarchical data from the NPDB, the initial source of data for the NCMCPS Database, is required by the users of the RTM in NCMCPS. The RTM obtains data from the NPDB database directly through the use of a custom data interface. All data interfaced between the NPDB database and the RTM is read-only.

C. U.S. NAVY STANDARD INTEGRATED PERSONNEL SYSTEM (NSIPS)

NSIPS is worldwide human resources support system which uses Commercial-off-the-Shelf (COTS) software and COTS hardware. Based on PeopleSoft and Oracle, NSIPS replaces the functional capabilities of four legacy systems that support pay and personnel activities afloat and ashore, including mobile units. The four systems being replaced are Source Data System (SDS), Reserve Standard Training, Administration, and Readiness Support for Manpower and Personnel (RSTARS (MP)), Uniform Microcomputer Dispersing System (UMIDS), and Diary Message Reporting System (DMRS) [11].

As of February 7, 2007, NSIPS achieved full operational capability with the completion of its last major milestone, final installation onboard the USS Kitty Hawk (CV 63) [12]. NSIPS offers Sailors around the clock access to their personnel information. The system ensures unprecedented safety and security of Navy pay and personnel records by requiring individual validation for entering, changing, viewing, and downloading information. NSIPS is the only navy program that is completely hosted on the Navy Marine Corps Intranet (NMCI) for the shore component of the application

D. OFFICER ASSIGNMENT INFORMATION SYSTEM II (OAIS II)

The Officer Assignment Information System II (OAISII) supports the assignment and transfer of the Navy's approximately 50,000 active duty naval officers. The system is used by 250 assignment and placement officers at the Navy Personnel Command (NPC) in Millington, TN, and supports an additional 350 senior staff, administrative and system support users. Through the medium of OAISII, officer personnel are proposed for pending vacancies, approved for placement and issued orders directing their transfer. Training assignments, order costing and the posting of vacant officer billets are also part of OAISII. Approximately 1200 officer assignment orders are created by the system weekly. OAISII is a data-driven system written in a fourth generation language, Model 204, and resides within the Model 204-database management system [13].

E. ENLISTED ASSIGNMENT INFORMATION SYSTEM (EAIS)

The Enlisted Assignment Information System (EAIS) is an order writing system used by approximately 200 enlisted personnel detailers at the Naval Personnel Center in Millington, TN to assign and distribute enlisted Naval Personnel. Through EAIS, U. S. Navy enlisted personnel are proposed for pending vacancies approved for placement and issued orders directing their transfer. EAIS provides order costing functionality and interfaces with the Navy Training Reservation System (NTRS) for assignment and management of training. Approximately 5,000 enlisted assignment orders are created by the system weekly in support of active duty U.S. Navy personnel worldwide.

F. TOTAL FORCE MANPOWER MANAGEMENT SYSTEM (TFMMS)

The Total Force Manpower Management System (TFMMS) provides users of manpower information with effective automatic data processing support for manpower planning and programming functions. It is the single, authoritative repository for Total force manpower requirements, Active Duty Manpower Personnel, Navy Reserve Personnel, Navy manpower authorizations, and End strength. In addition, TFMMS supplies information to other civilian and military personnel accounting and distribution systems to assist them in their total force management functions. TFMMS Manpower Management Approach is the tracking and displaying of Navy manpower requirements through the use of unique billet identification number (BINs). It provides capabilities for storage and retrieval of historical, current, budget, and out-year manpower data. It also provides access to current manpower data for resource sponsors, claimant, etc.

Billet data from the TFMMS is required by operators/users using RTM of NCMCMPS. The RTM obtains data from the TFMMS database directly through the use of a custom interface that is linked to approved stored procedures. All data interfaced between the TFMMS database and the RTM is read-only.

G. OFFICER DISTRIBUTION INFORMATION SYSTEM (ODIS)

The Officer Distribution Information System (ODIS) provides distribution personnel the capability to structure online, ad-hoc queries of data batch-extracted by ODIS from Officer Assignment Information System, Enlisted Assignment Information System, OPINS, NES and TFFMS. ODIS provides senior personnel in NPC, CNP, Chief Naval Operations and Department of Defense the ability to produce ad-hoc reports on demand. It also provides user-controlled reports on a variety of distribution functions not available elsewhere. ODIS is a data query system written in a fourth generation language, Model 204, and resides within the Model 204-database management system. ODIS will be replaced by MAST, Release 0 [14].

H. SEA WARRIOR/N1

The N1 Migration migrates existing Navy Manpower, Personnel, and Distribution systems into one enterprise system utilizing the PeopleSoft ERP. The N1 migration improves data integrity, and provides the foundation for a position based Navy which is needed to support Sea Warrior. The N1 Migration also consolidates the Navy's personnel data in preparation for DIMHRS, and will contain Navy unique functionality not incorporated into DIMHRS.

I. OFFICER PERSONNEL INFORMATION SYSTEM (OPINS)

The Officer Personnel Information System (OPINS) is a corporate system that generates and maintains the official automated personnel records of all the United States Navy/United States Navy Reserve (USN/USNR) active duty officers and officer candidates for both current and historical purposes. OPINS also maintains personnel records for active duty officers (Active Duty for Special Work (ADSW), Training Active Reserve (TAR)), Officer Candidates Accounting and Reporting Subsystem (OCARS), Navy Reserve Officer Training Corps (NROTC), and United States Naval Academy (USNA). OPINS is primarily used to calculate officer staffing strength, authorize the establishment of a pay record at the Defense Finance and Accounting Service (DFAS), prepare Officer Data Cards (ODC) for dissemination to officers, and prepare Officer Distribution Control Reports (ODCR) for dispersal to field activities. The officer distribution and promotion processes are dependent upon the quality of OPINS information, as are numerous managerial and congressional groups seeking aggregated information about the Active Officer populations. OPINS provides critical, historical, and current data for decision support systems as well as selection boards.

J. NAVY ENLISTED SYSTEM (NES)

The Navy Enlisted System (NES) is the Navy's corporate database of authoritative data on all active duty Navy enlisted personnel. The system generates and maintains the official automated personnel records of all United States Navy/United States Navy Reserve (USN/USNR) active duty enlisted personnel for both current and historical

purposes. NES is primarily used to calculate enlisted strength, to authorize the establishment of a pay record at Defense Finance Accounting Center, and to prepare Enlisted Distribution Verification Reports (EDVR) for distribution to field activities. The enlisted distribution and promotion processes are dependent upon the quality of NES information, as are numerous managerial and congressional groups overseeing aggregated information about the active enlisted population.

K. ELECTRONIC MILITARY PERSONNEL RECORDS SYSTEM (EMPRS)

EMPRS is the principle information tool used by the Navy Personnel Command to manage the Navy's military personnel records [15]. It is an image based information management and visualization tool used for processing, storing, displaying data.

L. NAVY PERSONNEL DATA BASE (NPDB)

Personnel and UIC hierarchical data from the NPDB is required by the users of the RTM. The RTM obtains data from the NPDB database directly through the use of a custom data interface. All data interfaced between the NPDB database and the RTM is read-only.

M. NAVY MANPOWER ONLINE (MOL)

The RTM will take advantage of the sign-on authentication of MOL to provide access to the RTM.

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APPENDIX B: CMS-ID FUNCTIONS

CMS-ID provides functionality for USN, FTS, and Selected Reserve roles, including:

A. SAILOR

- View and compare available jobs and job details
- View Qualification Match Indicators for available jobs
- View important alerts and notifications about issues that may affect eligible available jobs
- View job applications results
- Communicate Duty Preference and Career Intentions to Detailers
- Keep tabs on career data
- Update personal contact data
- Find out more about prospective commands and their locations

B. COMMAND CAREER COUNSELORS

- View available jobs within assigned UICs
- View Sailor personnel data, career history, applications, and alerts within a UICs
- Make application on Sailor behalf
- Communicate with Detailers regarding Sailor applications
- Search for, sort, and compare applications for assigned UICs
- View application results
- Enter/Update Command Web site
- View reports

C. DETAILERS

- Search for and view Sailors
- Search for and compare jobs and job details
- Make applications of Sailor behalf
- Compare applicants
- Sort applications
- View Sailor personnel data, career history, applications, and alerts
- Select and notify Sailors

D. COMMAND REP

- Search for and view Sailors within assigned UICs
- Search for and compare jobs and job details
- Make job comments
- View Sailor personnel data, career history, applications, and alerts within a UICs

- Compare, rank, and comment on applications
- Sort applications
- Enter/Update Command Web site
- View reports

APPENDIX C: APPLY BILLET SEARCH CRITERIA

A. BILLET SEARCH CRITERIA FOR ALL ROLES

- Community: (Unrestricted Line, Restricted Line, Staff Corps, Limited Duty Line, Limited Duty Staff, Chief Warrant Officer Line, Chief Warrant Officer Staff)
- Designator
- Paygrade: select a range (CWO1 to CWO5/O1 to O-4) default range will be from one grade below the user's current paygrade to one grade above the user's current paygrade.
- Primary Navy Officer Billet Code (NOBC)
- Secondary NOBC
- Region
- Navy Operational Support Center (NOSC)/Navy Reserve Activity (NRA) location: can multi-select
- Supported Command location: can multi-select
- Supported Command name: can multi-select
- Supported Command Unit Identification Code (UIC): can multi-select
- Reserve Program Code (RPC): can multi-select

The system shall use Reserve Functional Area and Sex (RFAS) codes to match any billet that is identified as an acceptable match to the paygrade and/or designator specified in the search criteria.

B. BILLET SEARCH CRITERIA FOR RC JUNIOR OFFICER:

In addition to the search criteria provided for all roles, the system shall present the RC Junior Officer with the following search criteria:

- Job match for Preferences
- Job match for Assignment Location

C. BILLET SEARCH CRITERIA FOR RC DETAILER AND RJOID MANAGER

In addition to the search criteria provided for all roles, the system shall present the RC Detailer and RJOID Manager with the following search criteria:

- Only show jobs with applicants
- Billets that have no applicant

The system shall provide the RC Detailer and RJOID Manager the ability to search by Active Unit Identification Code (AUIC) name, Unit Mobilization Unit Identification Code (UMUIC) name, or NOSC/NRA name without any filter or limiting conditions required for search initiation.

D. BILLET SEARCH CRITERIA FOR RC PROGRAM MANAGER

In addition to the search criteria provided for all roles, the system shall present the RC Program Manager with the following search criteria:

- Only jobs with applicants
- Billets that have no applicants

The system shall provide the RC Program Manager the ability to search by AUIC or UMUIC without any filter or limiting conditions required for search initiation.

APPENDIX D: APPLY BILLET DETAILS

A. BILLET DETAIL FOR ALL ROLES

Billet Detail information for the JOAPPLY roles - RC Junior Officer, RC Detailer, RC Program Manager, and RJOID Manager:

- Paygrade
- Designator
- Primary NOBC
- Secondary NOBC
- NOSC/NRA location
- NOSC/NRA address (street, city, state, zip)
- NOSC/NRA number
- Supported Command location
- Supported Command name
- Supported Command UIC
- RBSC
- UMUIC location
- Unit name
- UMUIC
- Job Community
- Job Title
- Job description
- Job comment
- Command comment
- Billet title
- RFAS code
- RFAS paygrade
- RFAS assignment codes
- RFAS designated sex
- Number of drills authorized

B. BILLET DETAIL FOR RC JUNIOR OFFICER

In addition to the billet detail presented to all roles, RC Junior Officer has the following included RC Junior Officer's qualification matches for

- Preferences
- Assignment Location
- Skills
- Policy

C. BILLET DETAIL FOR RC DETAILER

In addition to the billet detail abilities provided for all roles, the system shall provide the RC Detailer the following abilities:

- View all RC Junior Officers who have applied for the billet and all available RC Junior Officers who are qualified for the billet (based on RCN, paygrade, PRD, and RFAS substitutions)
- View all available RC Junior Officers who are qualified for the position (based on RCN, paygrade, PRD, and RFAS substitutions) and whose preferences match the billet details
- View all available RC Junior Officers whose preferences match the billet details
- Apply on behalf of RC Junior Officers
- Comment on the job

The system shall retain the job comments for a billet until that billet is filled.

D. BILLET DETAIL FOR RC PROGRAM MANAGER

In addition to the billet detail presented to all roles, the system shall present the RC Program Manager with a job overview, to include a table of all applicants, without any information that would identify the RC Junior Officer.

In addition to the billet detail abilities provided for all roles, the system shall provide the RC Program Manager the ability to make comments.

When a Command enters a comment, the system shall record the user's rank and name at the end of the comment.

The system shall retain the Command's job comments for a billet until that billet is filled.

E. BILLET DETAIL FOR RJOID MANAGER

In addition to the billet detail abilities provided for all roles, the system shall provide the RJOID Manager the following abilities:

- View all RC Junior Officers who are qualified for the position (based upon RCN, paygrade, PRD, and RFAS substitutions)
- View all RC Junior Officers whose preferences match the billet details
- Apply on behalf of RC Junior Officers

APPENDIX E: APPLICATION SEARCH

A. BILLET DETAILS PRESENTED FROM APPLICATION SEARCH.

- AUIC
- RBSC
- Billet Designator
- Billet Paygrade
- Primary NOBC
- Secondary NOBC
- NOSC/NRA location
- NOSC/NRA number
- Supported Command location
- Supported Command name
- UMUIC location
- Unit name
- UMUIC
- Number of applications associated with each job
- Command ranking comment indicator

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APPENDIX F: BILLET COMPARISON

A. BILLET DETAILS PRESENTED DURING BILLET COMPARISON

- AUIC
- RBSC
- Paygrade
- Designator
- Primary NOBC
- Secondary NOBC
- NOSC/NRA location
- Supported Command name
- RFAS authorized paygrade
- RFAS authorized designators

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APPENDIX G: RC JUNIOR OFFICER COMPARISON

A. RC JUNIOR OFFICER COMPARISON INFORMATION

- SSN
- Name (Last, First, Middle Initial)
- Designator
- Paygrade
- Primary NOBC
- Secondary NOBC
- PRD
- Expiration of Obligated Service (EOS)
- Manpower Availability Status (MAS) Code
- MAS Code date
- Individual Mobilization Status (IMS) Code
- IMS Code date
- Application preference ranking
- Command ranking
- Qualification matches for Preferences, Assignment Location , Skills, and Policy
- Secret clearance level
- Supported Command name
- NOSC/NRA location
- Training Reserve Unit Identification Code (TRUIC) location
- TRUIC name
- Email address(es)
- Phone number(s)

B. BILLET OVERVIEW WHEN COMPARING RC JUNIOR OFFICERS

- Designator
- Paygrade
- Primary NOBC
- Secondary NOBC
- NOSC/NRA location
- NOSC/NRA number
- Supported Command location
- Supported Command name
- Supported Command UIC
- RBSC
- UMUIC location
- Unit Name
- RFAS Code

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APPENDIX H: RC JUNIOR OFFICER PERSONNEL INFORMATION

A. RC JUNIOR OFFICER VIEW PROFESSIONAL INFORMATION

- SSN
- Name
- Designator
- Paygrade
- Date of rank
- NOBC (all on file)
- Pay
- Pay Entry Based Date (PEBD)
- Date Initially Entered Reserve Forces (DIERF)
- Date Initially Entered Military Service (DIEMS)
- Number of drills performed for the current fiscal year
- Assignment Type
- In-Assignment Processing (IAP) date
- MAS
- MAS date
- IMS
- IMS date
- EOS
- PRD
- Active Duty Start Date (ADSD)
- NOSC/NRA location
- NOSC/NRA number
- RBSC
- Supported Command location
- Supported Command name
- Supported Command UIC
- TRUIC
- TRUIC name
- Unit assignment date
- Billet assignment date
- Billet title
- UMUIC
- Unit name

B. RC JUNIOR OFFICER VIEW PERSONAL INFORMATION

- Year of birth
- Marital status
- Sex
- Military Spouse (Y or N)
- Primary dependent information, if applicable
- Secondary dependent information, if applicable
- Citizenship
- Location
- Nationality
- Home of record
- Home location
- Work telephone number
- Navy E-mail address
- Home telephone number
- Optional E-mail address
- Cell telephone number
- Current mailing address
- Contact Information Last Updated date

APPENDIX I: PREDEFINED ALERTS

The following figures may be used as illustrations to aid understanding of the requirements outlined in this document.

Table Predefined Alerts

Alert	Time Frame	Alert Text
Top Secret Clearance	Twelve months prior to review date	RJOID indicates that your security investigation requires review and updating. Contact your Security Manager to begin update procedures.
Security Clearance Outdated	When review date is prior to current date due to old information	RJOID indicates that your security clearance is out of date. Contact your security manager to begin review procedures. Per current policy, you will be unable to negotiate orders for positions requiring a security clearance.
Confidential and Secret Clearance	Thirteen months prior to review date	RJOID indicates that your security clearance information requires review. Contact your Security Manager to begin the review process.
Duty Preference Update	Ten months prior to PRD	RJOID indicates that you are approaching your Projected Rotation Date (PRD). Please fill out your Duty Preference information in RJOID Interactive Detailing.
Contact Information Update	On birth month anniversary	RJOID indicates that your user profile is due for a periodic review. Please provide updated contact information via RJOID Interactive Detailing.
Duty Preference Review	Twelve months prior to PRD	RJOID indicates that you are approaching your Projected Rotation Date (PRD). Please review your Duty Preference information in RJOID Interactive Detailing.
PRD Window	Nine months prior to PRD	RJOID indicates that you have just entered your negotiating window. Review and apply for available positions in RJOID Interactive Detailing.
Assignment Point Warning	Six months prior to PRD	RJOID indicates that you are not currently under orders. Review and apply for available positions in RJOID Interactive Detailing.
Assignment Point	Five months prior to PRD and thereafter until under orders	RJOID indicates that you are not currently under orders. Review and apply for available positions in RJOID. Contact your Career Counselor or Reserve Detailer as soon as possible.

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APPENDIX J: PREDEFINED NOTIFICATIONS

Table Predefined Notifications

Notification	Notification Text
Detailer Introduction	RJOID Interactive Detailing indicates that you have just entered your Projected Rotation Date (PRD) window. I will be your Detailer during the negotiation process and look forward to hearing from you. If you have questions concerning your career or possible next assignment, feel free to contact me.
Issues Affecting Re-assignment	RJOID Interactive Detailing indicates that you are eligible for assignment. Please inform me of any potential issues that may affect your assignment.
Assignment Point	RJOID Interactive Detailing indicates that you are approaching your Projected Rotation Date (PRD). Review the available vacancies within RJOID Interactive Detailing and submit applications for re-assignment. If you have questions or concerns, feel free to contact me as soon as possible.

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APPENDIX K: PLANE TICKET COSTS TO MEMPHIS, TN

From Expedia.com		
- Date from April 1 - April 11		
From	To	Cost
Dallas, TX	Memphis	\$325
New York, NY	Memphis	\$280
Detroit, MI	Memphis	\$290
Atlanta, GA	Memphis	\$175
San Francisco, CA	Memphis	\$240
San Diego, CA	Memphis	\$300
Norfolk, VA	Memphis	\$415
Seattle, WA	Memphis	\$250
Boston, MA	Memphis	\$200
Philadelphia, PA	Memphis	\$200
Phoenix, AZ	Memphis	\$260
Chicago, IL	Memphis	\$325
New Orleans, LA	Memphis	\$300
Washington DC	Memphis	\$255
Denver, CO	Memphis	\$250
Average		\$271
Max		\$415
Min		\$175
Accessed February 18, 2008		

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APPENDIX L: PER DIEM TABLE FOR MILLINGTON, TN

LOCATION (1)	County and/or Other Defined Location (2)	Seasons (Beg-End)	Max Lodging	Local Meals	Prop. Meals	Incidentals	Maximum Per Diem	Effective Date
ARNOLD AS	COFFEE & FRANKLIN	01/01-12/31	60	36	23	3	99	10/01/2005
BRENTWOOD	WILLIAMSON	01/01-12/31	82	46	28	3	131	10/01/2006
CHATTANOOGA	HAMILTON	01/01-12/31	81	41	25	3	125	10/01/2006
CHATTANOOGA NAVAL & MC RES CTR	HAMILTON	01/01-12/31	81	41	25	3	125	10/01/2006
FRANKLIN	WILLIAMSON	01/01-12/31	82	46	28	3	131	10/01/2006
GATLINBURG	SEVIER	01/01-12/31	67	46	28	3	116	10/01/2006
KINGSPORT NAVAL RESERVE CTR	SULLIVAN	01/01-12/31	60	36	23	3	99	10/01/2005
KNOXVILLE	KNOX	01/01-12/31	74	46	28	3	123	10/01/2006
KNOXVILLE NAVAL & MC RES CTR	KNOX	01/01-12/31	74	46	28	3	123	10/01/2006
MCGHEE TYSON APT AGS	BLOUNT	01/01-12/31	67	46	28	3	116	10/01/2006
MEMPHIS	SHELBY	01/01-12/31	83	46	28	3	132	10/01/2006
MILLINGTON NAVAL RES CTR	SHELBY	01/01-12/31	83	46	28	3	132	10/01/2006
NASHVILLE	DAVIDSON	01/01-12/31	99	51	30	3	153	10/01/2006
OAK RIDGE	ANDERSON	01/01-12/31	72	36	23	3	111	10/01/2006
SMYRNA VOLUNTEER TRNG CNTR	RUTHERFORD	01/01-12/31	60	36	23	3	99	10/01/2005
TOWNSEND	BLOUNT	01/01-12/31	67	46	28	3	116	10/01/2006
WILLIAMSON COUNTY	WILLIAMSON	01/01-12/31	82	46	28	3	131	10/01/2006

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APPENDIX M: 2007 PAY CHART AND ASSUMPTIONS

Partial 2007 Pay Chart			
	Monthly	Daily	Assumed
- Military	Basic Pay	Base Pay	TIS
RADM (O8)	\$11,580.30	\$386.01	26 years
RDML (O7)	\$10,236.00	\$341.20	23 years
CAPT (O6)	\$8,180.10	\$272.67	20 years
CDR (O5)	\$6,776.40	\$225.88	16 years
LCDR (O4)	\$5,602.80	\$186.76	10 years
LT (O3)	\$4,028.40	\$134.28	7 years
LTJG (O2)	\$3,239.70	\$107.99	3 years
ENS (O1)	\$2,469.30	\$82.31	1 year
MCPO (E9)	\$4,597.00	\$153.23	18 years
SCPO (E8)	\$3,715.00	\$123.83	15 years
CPO (E7)	\$3,250.20	\$108.34	12 years
PO1 (E6)	\$2,744.10	\$91.47	9 years
PO2 (E5)	\$2,323.80	\$77.46	6 years
PO3(E4)	1978.5	65.95	4 years
- Civilian	Annual	Monthly	Daily
GS -13 (Step 4)	\$73,647.00	\$6,137.25	\$204.58
- TIS: Time in Service			

Excerpt from Military Pay Table 2007

Assumptions:

1 month = 30 days
 1 year = 50 government work weeks
 1 year = 250 work days
 1 year = 2000 hours.

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